Agriculture for Development

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Special issue on Women in Agriculture
Women in agriculture: negotiating and networking
Gender differentials in access to land in India
Changing roles of North Ghanaian women in agriculture
Gender mainstreaming at the National Autonomous University of Mexico
Two perspectives on gender equality and food security
Rethinking how gender matters for food security
Negotiating productive and reproductive roles through time
Women in cooperative agriculture in Lesotho
Guidelines for Authors

Agriculture for Development

The editors welcome the submission of articles for publication that are directly related to the aims and objectives of the Association. These may be short communications relating to recent developments and other noteworthy items, letters to the editor, especially those relating to previous publications in the journal, and longer papers. It is also our policy to publish papers, or summaries, of the talks given at our meetings.

Only papers written in English are accepted. They must not have been submitted or accepted for publication elsewhere. Where there is more than one author, each author must have approved the final version of the submitted manuscript. Authors must have permission from colleagues to include their work as a personal communication.

Papers should be written in a concise, direct style and should not normally exceed 3,000 words using Times New Roman font, 12-point size for the text body, with lines single spaced and justified and pages numbered. Tables, graphs, and photographs may take a further 1 page plus, but we try to keep the total length of each paper to 3-4 pages of the Journal. Good quality photographs are particularly welcomed, as they add considerably to the appearance of the contents of the Journal. We prefer high resolution digital images.

Format

- An informative title not exceeding 10 words.
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- A short biographical note about the author(s) is included, preferably with a photograph of the author(s). If still working, indicate your position and email address. If retired, your previous job (eg formerly Professor of Agriculture, ABC University).
- For papers longer than 1,500 words, a short abstract (summary) of 150-200 words.
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- Results should be presented in an orderly fashion and make use of tables and figures where necessary.
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References

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- Use lower-case letters, eg a, b and c, for footnotes to tables.

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Cover photograph: Women working in a vegetable market in Tamale, Northern Ghana (Photo: Imogen Bellwood-Howard).
Special Issue on Women in agriculture: negotiating and networking

Contents

IFC  Guidelines for Authors
2  Editorial
2  Women in agriculture: negotiating and networking | Christine Okali and Imogen Bellwood-Howard
7  Article 1
7  Gender differentials in access to land: constraints, enabling factors and impacts on women’s status in India | Nitya Rao
12  News from the Field 1
12  The CGIAR: its research and development partnership | Maggie Gill
13  Article 2
13  The piper calls the tune: changing roles of Northern Ghanaian women in agriculture | Eileen Bogweh Nchani
19  News from the Field 2
19  The CGIAR Collaborative Platform for Gender Research | Rhianne Pyburn
20  Article 3
20  Gender mainstreaming: the case of the School of Veterinary Medicine and Animal Production in the National Autonomous University of Mexico (UNAM) | Rosa Elena Riano-Marin
24  News from the Field 3
24  Reconfiguration of Mexican rural economy and families: grandparents, guardians and caretakers | Rosa Elena Riano-Marin
27  Article 4
27  The rural women’s revolution? Two perspectives on gender equality and food security | Starada Keats and Maria Stavropoulou
32  Opinions Page
32  Agriculture for nutrition? Not without gender! | Nitya Rao
34  Article 5
34  Rethinking how gender matters for food security | Nozomi Kawarazuka, Catherine Locke and Janet Seely
38  News from the Field 4
38  From gender mainstreaming and empowering women in agriculture to gender transformation | Maria Hartl and Anita Kelles-Viitanen
39  Article 6
39  West African market women negotiating productive and reproductive roles through time | Imogen Bellwood-Howard
44  Bookstack
44  Gender in Agriculture: closing the knowledge gap | Quisumbing et al (Chris Garforth)
Gender and Forests: climate change, tenure, value chains and emerging issues | Pierce Colfer et al (Chris Garforth)
Transforming gender and food security in the global south | Njuki et al (Chris Garforth)
49  Article 7
49  Women in cooperative agriculture in Lesotho | Vusilizwe Thebe
54  International Agricultural Research News
54  A focus on women | Geoff Hawtin
57  TAA Forum
57  Web Manager’s Update | Keith Virgo
Membership Secretary’s Update | Linda Blunt
P&C Committee Update | Paul Harding
58  TAAF News
58  TAAF News | Antony Ellman
60  Obituaries
60  John Goldsack | Andrew Bennett
61  Professor Mike Mortimore | John Wibberley
62  Upcoming Events
IBC  How to become a member of the TAA
BC  Executive Committee members

The TAA is a professional association of individuals and corporate bodies concerned with the role of agriculture for development throughout the world. TAA brings together individuals and organisations from both developed and less-developed countries to enable them to contribute to international policies and actions aimed at reducing poverty and improving livelihoods. It grew out of the Imperial College of Tropical Agriculture (ICTA) Association, which was renamed the TAA in 1979. Its mission is to encourage the efficient and sustainable use of local resources and technologies, to arrest and reverse the degradation of the natural resources base on which agriculture depends and, by raising the productivity of both agriculture and related enterprises, to increase family incomes and commercial investment in the rural sector. Particular emphasis is given to rural areas in the tropics and subtropics and to countries with less-developed economies in temperate areas. TAA recognises the interrelated roles of farmers and other stakeholders living in rural areas, scientists (agriculturists, economists, sociologists etc), government and the private sector in achieving a convergent approach to rural development. This includes recognition of the importance of the role of women, the effect of AIDS and other social and cultural issues on the rural economy and livelihoods.

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Editorial

Women in agriculture: negotiating and networking

Christine Okali and Imogen Bellwood-Howard

Christine is a sociologist with research and development experience in the crop, forestry, livestock, and fisheries sectors working within various national and international organisations, and as a consultant. She has held research and teaching positions in Ghana, Nigeria, Niger and the UK. In the 1980s she managed the Humid Zone small-ruminant programme of the International Livestock Centre for Africa (ILCA) (now the International Livestock Research Institute, ILRI), and subsequently joined OXFAM America as Director of its Africa programme. Christine’s last full time position was at the School of International Development, the University of East Anglia. She has since consulted with the FAO, the Institute of Development Studies at the University of Sussex, UK, and the Independent Science and Partnership Council of the CGIAR. christine.okali@gmail.com.

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This special issue examines the diversity of ways that women not only participate in agriculture, but feature in agricultural development discourse, with technological change being viewed as a socially embedded process that is both non-binary and non-linear (Sumberg et al., 2012). For agricultural development, this means looking not only at differences between men’s and women’s experiences as they relate to critical factors of production, such as land (FAO, 2011), but also how they negotiate access to these, and for what purpose. It is also imperative to examine how the nature and meaning of these negotiations vary through time, for different people, at different stages of life, and in their various relations as wives/co-wives, sisters, mothers etc (Schroeder, 1999). The papers in this special issue all contribute to these reflections: they interrogate, directly or indirectly, the way women and men are framed, the contradictions within these framings, and the implications for expectations of change, especially when they are examined against evidence of actual behaviour and choices made in specific contexts. This approach requires a focus on change as an expression of women’s and men’s agency rather than as a result of a specific directed intervention designed to change norms or even a specific agricultural practice, and, quoting Jackson (2007), “the happy thought that there is no such thing as the status quo”.

This is not to endorse gender subordinations, or to deny that development is not always a benign process of social advancement, but, rather, a highly political struggle for re-negotiating power relations between men and women, and among social groups (Rao, 2008). Since the 1980s, questions of access to and ownership and use of land, water, labour, capital, credit, technology and infrastructure have focussed on the relatively disadvantaged position of women as a group of producers, compared with men, even their spouses: a position that is seen by some organisations to have implications for food security and poverty reduction, as well as for agricultural production and productivity more broadly, where these are viewed as outcomes of women’s agricultural work (FAO, 2011). Perhaps more importantly, it also has implications for the way we understand how households, wider families and even communities function. Seeking to fill identified gaps between women and men in terms of access to these resources and assets has consequently been a major preoccupation of studies of women in agriculture since the 1990s (Udry et al., 1997; Doss et al., 2012; Johnson et al., 2016). More recently, and especially since 2000, with the incorporation of women’s empowerment into the Millennium Development Goals (MDG3), this body of work has also been used to justify development interventions with emancipatory or empowerment objectives, and to perpetuate certain academic discourses (Whitehead, 2002). Yet it is also now recognised that there is a need to embrace the complexity and diversity involved in gender relations, to avoid emerging with overly simplistic conclusions. These may comprise essentialisms such as the idea that rural women are mostly “risk-averse food producers” (Jackson, 2007), or that the behaviour of men is usually unconstrained by norms of care and responsibility for others. There is also acknowledgement that gender, and perceptions of gender, intersect with other facets of identity such as age, class and wealth to shape interactions between people, including women (Okali, 2012).

While there is substantial agreement that women are relatively disadvantaged compared with men in their agricultural activities, the papers comprising this collection support the view that problems of social disadvantage – whether associated
with ethnicity, race, religion, social orientation, caste, descent, gender, age or disability – need to be understood in terms of power relations in specific locations and situations if relevant policies are to be drawn out from such understanding. These perceptions are critical for understanding change processes that include the spread of agricultural innovations. To conclude that difference between the asset portfolios of women and men, even husbands and wives or brothers and sisters, signals disadvantage, may also be misrepresenting the social world, including the ability, or not, of men and women to act in their own interest once an opportunity presents itself. Such opportunities may relate to a new resource, new regulation, change in the price of a crop or even introduction of an entirely new crop. Given new opportunities for earning non-farm income, women might even choose to migrate, as Nitya Rao and Rosa Marín report in this collection.

The various contributions on the topic of Women in Agriculture in this special issue of Agriculture for Development reflect on these relational concerns and the discourse around them. They aim to capture the diversity of ways that women interact with others in building their agricultural livelihoods, combining this with a consideration of how varied interpretations of these interactions are employed in agricultural development policy, programming and teaching. Thus, they provide a background against which we might understand women’s interactions with various agricultural technologies, and social change more broadly. Researchers of gender studies have for some time recognised the agricultural sector as a rich source of myths about gender interests and roles (Cornwall et al, 2003). These overlap with other myths not specifically gender focussed, which are related to the desirability of community management and the inevitably empowering effects of participation (Okali et al, 1994). While elements of these participatory processes may indeed be transformative for women, they need to be empirically investigated across different contexts, rather than simply taken for granted.

Papers from Nitya Rao and Eileen Nchanji take the issue of women’s land relations as their starting point. Those of Vusilizwe Thebe and Imogen Bellwood-Howard focus more on labour, although its interaction with land relations is not forgotten. These authors also make reference to gender mainstreaming strategies, in use since 1995, and even earlier, for arriving at transformative changes for women. The theme of gender mainstreaming itself is more explicitly tackled in the papers from Nozomi Kawarazuka, Catherine Locke, and Janet Seeley, Rosa Marín, and Sharada Keats and Maria Stavropoulou, which last also compares the impacts of gender mainstreaming with those of demographic change on the lives of women and girls.

The question of secure land rights for women has sat centrally in debates about women in agriculture for almost half a century. Discourse supporting the same land rights for women and men has emphasised their value as enablers of investment, even innovativeness and empowerment. They are also assumed to serve as evidence of gender equity and gender justice having been achieved. As may be expected, this discourse has been contested, with fierce debate between those who claim that there is a need for formalisation of rights for women and men, and those who claim that informal routes of access to land are a more relevant concern (Jackson, 2003; Agarwal, 2003). Some voices support paying attention to the notions of community, and even lineage, over individual rights: Berry (2001) argues that all these relations interact in land claims in Ashanti, Ghana, claiming that communities provide the framework within which the majority of rural populations, at least in sub-Saharan Africa and India, live. Her work shows that, among the Ashanti, land is owned and administered, not in relation to a set of rules and enforcement mechanisms but as a social process calling on culture, kinship and other social relations.

Most recently, Doss (2017) has provided a substantive critique of the data used to support the concept of ‘gender gaps’ in field and land sizes between women and men, and related productivity gaps. In her 2017 paper, Nitya Rao compares land regimes in India, China and Indonesia and demonstrates the way land tenure regimes are embedded in social, historical and political context. Based on this, she proposes the way forward for land policy planning, and for assessing outcomes such as gender equity.

In this issue, Rao uses information on state formation, and on state-level differences in legislation supporting rights of daughters to inherit parental property, to argue that in many instances women’s call for rights is about expectations of recognition and legitimacy rather than productivity increases. In these cases, she argues that women are well aware that even if they inherit land from their parents, they may not be in a position to exercise these land rights even if they have no brothers. Equally and perhaps more important, she emphasises that these rights might refer to marginal lands that are often under threat from competing land users, such as demonstrated in her photo showing the encroachment of Eucalyptus plantations on the commons. Rao argues for “a situated understanding of the gender equality goal and how to get there” and emphasises throughout her paper that rights for women are not always the top priority – caste and poverty are equally if not more important, considering, for example, the very low levels of land ownership of men and women within Scheduled Castes and other disadvantaged groups in India.

Eileen Nchanji picks up similar themes, but in the sub-Saharan African context, examines how northern Ghanaian women’s mechanisms of access to land have responded to dynamic agricultural development policies and programmes. She shows how women’s engagement in agriculture has been influenced by ‘gender sensitive’ agricultural policy, but argues that this is not a pre-requisite for their own food security strategies. Their alternative strategies for meeting their food provisioning responsibilities include marketing and gleaning. The success of these depend on women situating themselves within a web of community and kinship relations, rather than on their gaining autonomous ownership of productive land. Thus, although land ownership and access can be important, it is one of many food system functions that women perform.

Yet Nchanji’s work, as that of Rao, does not downplay the importance of land relations: she illustrates how gender mainstreaming policy has played a role in assisting women to gain access to productive land in ways that were not previously possible. Importantly, she shows how context-specific norms related to women’s role in the food system condition the
importance of gender mainstreaming policies that conceptualise women as productive actors.

Rosa Marín also shows how gender mainstreaming approaches, and especially training programmes, can influence the work of professionals hired to deliver agricultural services. Her detailed account describes how the National Autonomous University of Mexico (UNAM) has, and continues to celebrate, agreements made by many countries in the 1990s, to mainstream gender in all state institutions. Although presented here as a straightforward event, gender mainstreaming has proven to be a difficult policy to implement in many institutions, both state and others. In part, this reflects the distance between gender mainstreaming objectives and core organisational values and goals of many institutions. By the late 1990s, there was widespread agreement that the strategy for achieving gender equity on an international scale, using gender mainstreaming as a tool, had largely failed. In stark contrast to this conclusion, it is rare today not to see some element of a commitment to gender equity being made by natural resources research and development organisations, even though many of these organisations are dominated by technical concerns.

In conversation with Christine Okali, Maggie Gill details the CGIAR commitment to gender mainstreaming and concludes that it continues to make progress in ensuring that gender equity and inclusion are embedded in the design of agricultural research, even though it would benefit from having more social scientists in its research teams. The case of the CGIAR demonstrates the complexity of gender mainstreaming when a large agricultural research organisation working with almost a thousand research and development partners is involved. The commitment to mainstream gender might include the development of a gender strategy, agreements to deliver gender equity, support for women’s empowerment and the hiring of more senior women (eg CGIAR, 2011). These actions may nevertheless become more problematic as implementation proceeds and responsibility shifts from researchers to development partners; goals might be translated into targets to be achieved in rural communities by following a linear pathway of technology development and delivery, in a context of shifting ideas of how to reach the objective, or how to interpret any sex-disaggregated data collected during monitoring. Ultimately, outcomes which are admittedly vague and fuzzy, such as equity, empowerment and even agency, are subject to interpretations that fit long-established research and development approaches and paradigms of social change in the context of agricultural development.

Marín, a professional veterinarian by training, with a considerable background in social research in development, reflects on the success of elements of a gender mainstreaming policy at UNAM which spans two decades, and in which she herself has played a key role. Alongside a more general commitment to gender mainstreaming, she introduced a gender-focussed training module for veterinary students in her own Department, and her article reflects on the value of a training module that moves beyond ideas of women’s empowerment to include reflections on gendered relations more broadly in the rural society. Her observations in her *News from the Field* reflect on the context around which the course revolves, where women and men work together in family businesses, rather than in isolated enterprises. This is a relevant message for the implementation of gender mainstreaming in other training contexts.

Gender mainstreaming policy is also the focus of Sharada Keats and Maria Stavropoulou’s paper. They conclude that, although mainstreaming may have had effects of the type described in Ncchanji’s paper, changing global demographic contexts may be more important in explaining shifts in the lot of rural women and girls over decades. As Rao, they argue for a more holistic assessment of the roles of women, as members of rural communities which have changed for the better, with impacts for women, men and children. At the same time, they argue that falls in fertility, along with improvements in facilities, from health centres to water and roads, may better explain the improved lot of such rural communities in general. Similarly, they suggest that a perspective which considers the wide ranging roles of women in food chains may be more illuminating than one which perceives them primarily as farmers.

Nozomi Kawarazuka, Catherine Locke, and Janet Seeley also emphasise the importance of a relational approach to gender. They address how fairly individualistic ideas about the empowerment of autonomous women may evolve into more relational models of women as actors within a network of social relations. They point out, similarly to Ncchanji, that women often invest in men’s control over land to which they may later negotiate access. They also call for a more nuanced understanding of women’s role in food security, which considers their multiple roles not only as food producers but also as actors at various other nodes in food webs, and the need to focus on long-term rather than short-term food provisioning.

This task is taken up in Imogen Bellwood-Howard’s article, which takes a long view of the role of West African women as agricultural marketers. It argues that their ability to control their own labour, and that of their children, is central to their enduring success in making a living from marketing. West African women have persisted as marketers through periods characterised by change in technology and in ideology about the role of women in agricultural trade. Such a moment is apparent in the contemporary context of the movement for a new ‘African Green Revolution’, and women’s ability to control labour relations on- and off-farm will be critical to how their marketing and farming roles persist through this period. In their favour is the challenge by Palacios-Lopez et al (2017) to the longstanding discourse that most agricultural labour is performed by women in sub-Saharan Africa, alongside the established reality that women’s farm labour contributions vary spatially, across time, and in different social relational contexts (Whitehead, 1994). Given this variability, in the future, it is perhaps more pertinent to look at how labour dynamics interact with commercialisation, new technology and land tenure relations that are themselves inextricably linked to political change, than to focus on the proportions of labour contributed by men and women. Commercialisation and the introduction of modern technologies can tend to target men, stratifying agricultural labour. This is not a given, but often occurs when such technology is accompanied by an ideology implicating men in commercialised mechanised agriculture (Beneria & Sen, 1981).
In some parts of Asia, higher population densities and greater pools of unlanded labourers mean that waged agricultural labour may play a more prominent role than in sub-Saharan Africa, with the exception of the settler economies in southern Africa where prime land was alienated from the larger population (Berneria & Sen, 1981). The gendered nature of labour patterns is also entwined with class relations – for example, wealthier women may employ others as wage labourers in family farms (Rao, 2011; Balasubramanian et al., 2002). Gendered agricultural labour patterns are also intrinsically linked to the relation between reproductive and productive economies (Elsom, 1999). The involvement of both women and men in reproductive work influences their involvement in agricultural labour in complex ways that entail synergies and trade-offs for everyone involved. This is the case not only in subsistence agriculture, but also in commercial systems and wage labour situations.

Nitya Rao, in her brief update on efforts to improve child nutrition and health by the project Leveraging Agriculture for Nutrition in South Asia (Lansa), points to the importance of the regularity of feeding and care work. Lansa understands that achieving this will depend on the flexibility between productive and reproductive work within households, and therefore on whether and how these might be negotiated between women and men, even across generations. Rao points out that both women and men may try to fulfil this reproductive role, possibly by marketing their labour locally or through labour migration, and direct their incomes towards household functions. Women’s commercial and wage earning capacity is reported to impact positively on their intra-household bargaining power regardless of where they direct any income earned, and this also has implications for household nutrition.

A setting of labour migration is the background for Vusilizwe Thebe’s article, relating how female members of agricultural cooperatives manage land and labour in farm work. In Lesotho, women who joined cooperatives alongside men responded dynamically to new opportunities, which provided routes to income generation and livelihood development in a context of changing labour relations. These women were often remaining at home as men migrated to work in South Africa. As the flow of migrant labour slowed down, women often ended up pooling land, especially giving over their own unfarmed plots to the cooperative pool, to safeguard them. They also took advantage of the preferential access that the cooperatives offered to agricultural inputs to start new enterprises such as animal rearing.

Thebe’s work shows, like Marin’s, how labour migration influences the roles of those who remain as well as those who migrate. In contrast to Thebe’s narrative of economic empowerment, Gordon (1981) shows how Lesothan women did not gain control over land in the 1980s but remained rather like powerless caretakers of their absent husbands’ property. The extent to which this represents a ‘feminisation of agriculture’ is debatable, as women may or may not provide their own labour to agricultural endeavours. Extended family structures can provide support with tasks such as ploughing, but the importance of these may diminish over time as agricultural economies become capitalised. Many women had to find cash to pay to maintain farms in the absence of their male relatives (Brown, 1983). Marin, in a different setting, reminds us that women also migrate, often leaving children with their maternal grandparents. The effects of this is heterogeneous for girls, boys, grandmothers and grandfathers (Acosta, 2011), considering that each of their changed reproductive and productive labour allocations may be mediated through remittances. In contexts where both men and women migrate, there are implications not only for the household economy but for interpersonal relations between spouses, parents and children (Locke et al., 2014). The effects of migration, and its drivers, are therefore, of course, context-specific between settings and even households. Thus, the study of labour migration provides a useful arena for examining how changing livelihood patterns influence relations between men, women, children, and the agricultural resources they manage jointly and separately.

These more nuanced approaches to gender relations are increasingly recognised in mainstream development literature and advocacy, as reflected in the 2014 book Gender in Agriculture: closing the knowledge gap reviewed in this issue. Although the reviewer criticises its silence on the issues of politics and power, this publication represents recognition on the part of the agricultural research establishment that gender analysis has moved from examination of women’s role in agriculture towards a consideration of the context-specific ways men and women interact in various settings. At the same time, the updates on the activities of centres affiliated with the Association of International Research and Development Centres for Agriculture show a range of contemporary approaches to gender issues in agricultural development activity. At the institutional level, the International Centre for Biosaline Agriculture has launched an initiative aiming not merely to increase the number of Arab women scientists it represents, but to provide them with services, such as mentoring, to overcome the challenges they face in terms of accessing leadership opportunities. In a similar vein, CABi has highlighted gender mainstreaming concerns in its new Science Strategy.

The reviewed title Gender and Forests: climate change, tenure, value chains and emerging issues (2016) similarly reflects on how change is achieved. As the reviewer notes, because some of the research detailed in this volume looks at the process and outcomes of policies and interventions (in particular REDD+), it also offers some insights into what does and does not work. It points to unintended consequences of efforts to improve gender equality in forest resource management in spite of participatory involvement of women and others in the design and monitoring of projects. Equity in participation has to be accompanied by a strategy or strategies for achieving equity in outcomes. As a number of papers in this special issue suggest, women are able to negotiate at the level of households and kin groups and at other levels, even within projects that are frequently externally designed. It is interesting that the word ‘power’ does not stand out in this volume. As our reviewer points out, there are longstanding and emerging issues regardless of which institutions are involved, which prompt him to observe that many of the visions displayed in this volume are utopian and will require new thinking.

The concern of a number of the papers in this special issue with transformation in the status and position of women in
agriculture, rather than simply supporting their input and resource needs, is central to the review of the volume *Transforming gender and food security in the global south* (2016). The review speaks to the challenge of connecting analytical approaches with evidence of transformative change for women. The volume has a practical focus and does take power into account. It points to the more positive evidence of change reached using quantitative assessments rather than qualitative approaches. It claims that qualitative methods point to the complexities of changing gender dynamics over time and are less optimistic about transformation resulting from development projects themselves. Evidence of women’s empowerment at local/household levels appears to be more optimistic than change at meso and macro levels, where market structures and regulatory regimes appear to be resistant to gender equality. Thus, the big question in the second decade of the 21st century is not whether gender equality can reduce food insecurity, but what strategies are successful in reducing gender inequalities.

In sum, these papers and updates confirm the importance of maintaining a critical perspective on women’s land and labour relations. This perspective is one that recognises the policy and political context of the contemporary discourse on women in agriculture, within which much of what we try and do is situated. In this contemporary period, this is gender mainstreaming, and it is a discourse that privileges women. At the same time, therefore, the papers highlight the importance of taking a more complex and nuanced look at the relations of women with each other and with men, children, and external organisations in the agricultural sector. Women’s and men’s multiple agricultural roles rely on continual interaction with others, as well as with discourses about their appropriate roles and responsibilities. These may emerge from political imperatives, to do with women’s empowerment and gender mainstreaming, for example. They also show that a complex array of factors mediate in the process through which policy attempts to influence women’s agricultural outcomes. These factors include technology, migration, professional attitudes, social groupings such as cooperatives, and demographic trends. Policies and programmes aimed at supporting women’s work in agriculture can be kept relevant by considering the context-specific and often contested influences that these factors have on gender outcomes.


References


Gender differentials in access to land: constraints, enabling factors and impacts on women’s status in India

Nitya Rao

Abstract

In India, reports of malnutrition and persistent rural poverty and disadvantage, alongside the reality of a feminised agricultural sector, have focussed agricultural policy attention towards increasing the productivity of women farmers. The paper draws on the author’s long-term primary research in India, literature and data to explore the ways in which women’s productivity could be affected by a range of issues, particularly their access and ownership of land and other productive assets, their workforce participation, and their incomes, status and position in society. The paper concludes that laws and policies designed to achieve gender equity have not been very successful on the ground. It questions the conceptual underpinnings of the laws and policies and argues for a multi-dimensional understanding of local access strategies used by women.

Introduction

In an agrarian society such as India, land is a crucial productive resource, essential to meeting local and national needs. A lack of public investment in irrigation, R&D, or supportive pricing and trade policies over the past two decades, in line with neoliberal economic policies, has contributed to stagnation in agricultural growth. The situation has worsened with growing competition for scarce land, including from industry. These changes have led to agrarian distress and contributed to large-scale male migration from rural to urban areas in search of alternate employment, leaving women to manage the land. Consequently, alongside reports of malnutrition and persistent rural poverty and disadvantage (World Bank, 2009; GHI, 2017), there have been calls to refocus policy attention on improving the production capacity of women farmers, a key one being their limited control over productive assets, especially land. Following mainstream gender policy discourse a policy shift to improving the land rights of women was expected to result in improvements in land productivity, household food security, incomes and wellbeing, in addition to demonstrating the acceptance by government of gender equality as a policy priority (Kelkar, 2011). This policy discourse uncritically links improvements in gender equality, in this instance, land rights for women who manage the land, or women farmers, with women’s empowerment and a broad set of social and economic improvements. Clearly, while control over critical assets such as land can enhance women’s bargaining power and reorient crop choices at the farm level, without institutional mechanisms to support women farmers and macro-economic policy shifts, productivity gains are unlikely to be significant.

This paper examines the relationship between improved asset access and an expansion in opportunities (especially improved livelihoods) available to women, as well as employment outcomes. It does this while acknowledging that women are not a homogenous category and their asset access is mediated by the social relations in which they are embedded, including their class, caste, ethnicity, age and stage in the life cycle, marital status and regional location (culture). The paper therefore highlights evidence on the role that different governance and kinship systems across India play in shaping the legitimacy of women’s rights to land, and the implications of this for achieving policy goals. Conceptually the paper argues for a multi-dimensional framework for understanding land access and local access strategies.

The paper begins by briefly listing key legislative changes directed at improving the status and position of women, and other disadvantaged groups, especially Scheduled Tribes and Scheduled Castes, reflecting traditional caste-based power relations. It then maps out the gendered differences in access to land and other resources and the links between women’s land, their asset ownership and their own expectations of recognition and legitimacy rather than of productivity increases. Given that their land is often poor and marginal, women would appear to be better off outside the sector, like many men who have already moved out.

Legislative changes

Starting with the Constitutional Fundamental Rights and Directive Principles of State Policy developed between 1947 and 1949, which assured equality before the law irrespective of sex, race, caste and religion, there has been a slow but systematic effort to make the legal framework in India both gender-equitable and gender-just. The 73rd and 74th Constitutional Amendments made in 1992, granted women a
quota of one-third of the seats in all elected local government institutions and a host of policies have been formulated from the Sixth Development Plan (1980-85) onwards to strengthen the entitlements of, and support to, women farmers. These policies include joint titles to land (Rao, 2013). In 2005, amendments to the 1956 Hindu Succession Act removed gender discriminatory provisions to provide daughters and sons equal entitlements to agricultural land. In addition to these revisions to support women’s agricultural work, legislation such as the 2005 Domestic Violence Act, the 2005 National Rural Employment Guarantee Act, or the 2013 National Food Security Act, are seeking to support women’s rights to live and work without fear of violence, and ensure their entitlements to basic needs as equal citizens.

India being a federal country, implementation of these laws and policies, especially laws relating to land rights, varies by state, but, overall, it has been slow, if not near absent. This is not surprising given that land represents more than a physical asset and a source of material wealth; rather it refigures the meanings of power and authority in society. It is deeply embedded in marital and kinship relations, largely patriarchal and patrilineal, as well as notions of citizenship and entitlements within plural governance systems – statutory, religious, and customary. Pressures on land add to the complexities mediating women’s land access such as its location in the natal or marital home, mode of acquisition (inheritance, markets, state), the type and extent of rights (legal, use), and the larger political economy context that shapes state policies and priorities within which claims are negotiated (Rao, 2011).

While equitable laws are an essential starting point for ensuring women’s rights to land and gender equality, it is evident that laws alone are not sufficient. The rule of law requires mechanisms for implementation to be put in place, to ensure accountability, legitimacy and voice, and to be successful, these mechanisms must be resourced and monitored, but also be creative and dynamic.

**Gendered differences in access to land and productive assets**

Most available asset data have been collected at the household rather than individual level, making it difficult to gain a precise understanding of women’s access to and control over productive assets. At best, assets can be classified by the sex of the head of the household, wherein female headed households (FHH) are largely male-absent ones, while male headed households (MHH) include adult women. Although these data provide some insight into possible differences between male and female headed households, they tell us little about the asset access of a majority of rural women, who live in male headed households. Unlike in the case of employment, it is therefore difficult to establish precise relationships between asset ownership and a range of empowerment and decision-making variables.

While we are especially interested in gendered differences in access to land, this has to be seen against the backdrop of increases in the number of marginal holdings and overall growing inequality of land ownership as indicated by agricultural census data (Table 1).

![Figure 1. Gendered change in ownership of operational holdings (in percent).](image)

The inequality in the distribution of land also emerges from micro-studies. Ramachandran et al. (2010) reporting from their three study villages in Andhra Pradesh find that landlords and big capitalist farmers, while occupying only 2, 3 and 1 percent of holdings in the respective study villages, owned 25, 22 and 19 percent of the village lands. At the same time, disaggregating this by gender reveals an increase (by 2.6 percent) in the proportion of holdings held in the names of women between 1995 and 2011 (Figure 1).

A study conducted by the Working Group on Women’s Land Ownership (WGWLO), a network of 23 NGOs and CBOs working for women’s rights in 12 districts of Gujarat (WGWLO, 2004), demonstrates the various ways in which women might

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### Table 1. Percentage of operational holdings by size class and gender of head of household.

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<tbody>
<tr>
<td></td>
<td>MHH</td>
<td>FHH</td>
<td>Total</td>
<td>MHH</td>
</tr>
<tr>
<td>Marginal</td>
<td>61.3</td>
<td>69.6</td>
<td>62.1</td>
<td>62.4</td>
</tr>
<tr>
<td>Small</td>
<td>19.0</td>
<td>17.2</td>
<td>18.8</td>
<td>19.2</td>
</tr>
<tr>
<td>Semi-medium</td>
<td>12.5</td>
<td>9.2</td>
<td>12.1</td>
<td>11.9</td>
</tr>
<tr>
<td>Medium</td>
<td>6.1</td>
<td>3.5</td>
<td>5.9</td>
<td>5.5</td>
</tr>
<tr>
<td>Large</td>
<td>1.1</td>
<td>0.5</td>
<td>1.0</td>
<td>0.9</td>
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acquire their rights, and the difficulties they might encounter. In their study covering 23 villages, women accounted for roughly 12 percent of a total of 4,749 land-holders. In-depth interviews were conducted with 403 of these women to learn more about the process by which they had acquired land, and what land-holding might mean for them. Almost half (48 percent) were widows who had claimed a share in their husband’s property, while 41 percent were still married. The latter had received titles either with a view to claiming particular state-announced tax benefits, or for their husbands to escape land ceiling laws. Many did not know they held land titles. Just less than 5 percent had inherited a share of their natal property, in the absence of male heirs. They were responsible for the care of their parents.

Of the women with land titles, only 20 percent were cultivating their own land – and took decisions on cropping and sale – despite confronting a host of difficulties such as accessing irrigation, credit (less than 10 percent had access to credit or agricultural cooperatives), and technical information, negative attitudes of family members, and lack of support from the state revenue bureaucracy. So, even when women have land rights this does not automatically translate into decision-making power, even in Gujarat State that has historically sat at the forefront of efforts to support rights for women: from the Self Employed Women’s Association (SEWA), born out of a textile workers union in 1971, or within the dairy sector as members of cooperatives such as the Annual Dairy Cooperative formed in 1950.

Other states also present us with contradictions for which there are no simple answers.

For example, the difference in landholding size between men and women is the lowest in Uttar Pradesh (UP), despite this state being the patriarchal heartland of India (Figure 2). Given that this is one state that has not yet amended its inheritance and tenancy laws to allow equal inheritance rights to daughters and sons, we might be led (in the absence of supporting data) to suggest that this apparent gender equality in landholding size simply reflects attempts to overcome land ceiling laws through the division of property held by the landed elite.

![Figure 2. Average size (ha) of operational holdings by gender for select States (Source: Agricensus 2005-2006).](image)

Although regional/state-level differences highlight the importance of paying serious attention to both cultural and kinship variations, and the political economy imperatives across contexts, they do not necessarily demonstrate an expected pattern. West Bengal and Kerala present interesting contrasts. While both states underwent land reforms under left party-led governments, women in West Bengal did not benefit and were left with the highest gender difference in landholding size. Overall, West Bengal, even post-independence, has been characterised by mass illiteracy and poverty, and with strong divisions between landlords and tenants. The purpose of land reform in this state was to secure tenancy, rather than ownership rights. It was men, who ploughed the land, who were eligible to be tenants, rather than women, engaged in all other operations. Kerala, on the other hand, was already ahead by the time it was incorporated into the Indian State in 1950: it had a history of higher education for girls, and a matrilineal tradition amongst the landed groups. Here, these same land reforms appear to have resulted in gains for women.

The story that emerges from a study of 504 households across 19 villages in Andhra Pradesh and Bihar (UN Women & RDI, 2011) is that the key problem in women’s ownership is one of recognition and legitimacy. Surprisingly, husbands were largely (85 percent) supportive of wives having legal rights to own land. Women themselves were less supportive: 40 percent denied this right. On the other hand, despite supportive husbands, 60 percent of the women felt that they would be unable to farm their inherited land, due to lack of community recognition. In practical terms, the study found that 70 percent of land in male-headed households was acquired through inheritance whereas this was the case for only 57 percent of female-headed households. In their case, 29 percent reported buying their homestead plot.

I briefly examine the evidence available on gendered input use, access to information and extension, and access to agricultural credit, to provide more insight into the problem of recognition and legitimacy faced by women.

**Access to inputs, technology and services**

Studies on access to technical inputs (seed varieties, fertilisers) and natural resources, (such as water and soil fertility), have largely focussed on sub-Saharan Africa. Most of the more recent of these conclude that there is no significant difference in resource use and the introduction of new (to them) technology between male and female farmers, once land, education and labour are controlled for (Peterman et al, 2010). In India, state subsidised inputs, such as seeds for horticultural crops, are often restricted to larger holdings, leaving small and marginal farmers, and women, who are over-represented in this group, disadvantaged. The disadvantaged position of smaller farmers is further confirmed by the 2006/7 Agricultural Census: 28 percent of marginal farmers had access to certified seeds, while the figure is 37-40 percent for medium and large farmers.

A second element in improving production is the access to information, extension services and credit. Although women are increasingly the primary cultivators in the absence of their men, the land on which they are working is household land and they are not the title holders. As a consequence, they are not recognised as farmers – which excludes them from accessing bank credit or indeed from membership of, and decision-making within, farmer organisations, irrigation groups and development projects more generally. This might change in the future with increased access to information and communication technologies, which are becoming an important tool for information dissemination. The announcement of the Government of India in 2012 to provide...
mobile phones to all households below the poverty line, and the more recent *Digital India* campaign, can potentially transform access to information for the poorest households. Providing adequate attention is given to gender relations in the distribution of these phones, women will also benefit.

**Asset ownership and women’s work force participation: exploring the links**

Gendered labour force participation, and the changes it has undergone over time, has perhaps been the one area that has been analysed in-depth in the case of India, given the availability of individual-level data. The National Sample Survey Office (NSSO) employment-unemployment surveys are the best source of information on labour use across sectors and activities. What has been less explored is the relationship of workforce participation with asset ownership. In this section, I briefly set out the gendered division of labour in farming (based on NSSO data, small-scale surveys and long-term studies of rural change), and then examine the possible linkages with asset ownership.

**Women’s employment in agriculture**

![Figure 3. Women harvesting their crop in the commons in Wardha, Maharashtra, India. In the background Eucalyptus plantations for the paper industry moving onto the commons (Photo: Nithya Rao).](image)

Examining the different types of employment in agriculture, roughly 65 percent of both men and women are classified as self-employed, and the remaining as casual workers. The share of full-time (regular) workers is negligible (Srivasatava & Srivasatava, 2010). While there has been optimism in some quarters about the increase in self-employment reflecting the opening-up of new productive opportunities, a deeper analysis reveals that it has involved a downward spiral for women in the sense that they have been investing more labour and time for lower returns. This can only be seen as a form of distress employment (Unni & Raveendran, 2007).

The category of self-employment includes both own-account workers and unpaid household helpers. In a disaggregated, sectoral analysis of self-employment, using NSSO data, Neetha (2010) makes several interesting observations: across sectors, there has been a decline in women own-account workers, but expansion in women’s unpaid work as helpers in household enterprises, both farm and non-farm. Within the agricultural sector, unpaid female family labour constituting close to 70 percent of women categorised as self-employed, have replaced hired wage workers (see also Djurfeldt *et al.*, 2008). This is also evident in the declining number of casual agricultural labourers (Himanshu, 2011).

Given this pattern of employment in agriculture, two inter-related questions arise. First, does the ownership of land improve the terms of work participation for women? Second, does women’s work participation result in increased purchase of assets by them? I explore these briefly below.

Women’s work participation needs to be understood in the context of male migration, and pressures for survival. In such circumstances, women’s resources are almost entirely directed to household survival and subsistence (Mencher, 1988), rather than asset accumulation. This is especially the case in a context of low wages and low returns for women’s work, price rises, and the increasing cost of living. Rao (2012) found in her Uttar Pradesh study that female agricultural work largely constituted work as unpaid household helpers on family farms. So, to earn some cash, especially in the absence of migrant husbands, women supplemented this with low paid, home-based, bead-making work. Withdrawal of women from the workforce is then potentially a sign of household status and wellbeing.

Available evidence seems to suggest that land ownership is crucial for gaining access to all other assets, especially in rural contexts. In the absence of land, what do poor rural women invest in? Heyer (1989, 1992) in her Coimbatore study found that landless women’s asset strategies included investing in the education of their children, in gifts and dowry exchanges (as a way of building social capital), and in jewelry or other mobile assets. Labour was their biggest asset, hence they sought to both increase the productivity of labour and also its flexibility. They felt that land or livestock would tie them down to the village. Swaminathan *et al.* (2011), in their study of gendered assets in Karnataka, also note that jewelry was the only asset where individual ownership by women dominated: they owned 69 percent of all jewelry in rural areas. This was primarily secured as gifts at the time of marriage, but women also purchased it from their own earnings.

Nevertheless, inheritance remained the major channel for the acquisition of landed property: men from their natal family, and women from their marital households, especially after the death of husbands. Self-acquisition was less common, except in urban areas, and was dominated by men, who had greater resources available to purchase land or property than women. In rural areas, women could also acquire housing through government schemes targeting women such as the *Indira Awas Yojana*. With their limited earnings, what women seem to look for in assets is something moveable and liquid that can provide them security, especially in times of crisis.

There is a second crucial issue and this relates to the nature of property, whether marital or natal, and the legitimacy of women’s subject-position in relation to her land claims (Rao, 2008). A widow’s claims to her marital property are largely seen as legitimate, unless widowhood is triggered by unusual circumstances such as HIV/AIDS (see, for instance, Swaminathan *et al.*, 2009). On the other hand, a daughter’s claim to a share in her natal property, even though a legal right, is seen as illegitimate, as claiming a ‘double share’ (Chowdhry, 1997), almost as breaking social relations with her brother and natal family. An exception here is the practice of *ghar jamai* (resident son-in-law), when a daughter inherits land, but this is usually in the absence of brothers. Nevertheless, women who continue to
live in their natal village with their husbands, with social support from their own friends and kin, may also retain *ghar jamat* rights, but these rights are increasingly under attack and subject to violent confrontations, especially in a context of land scarcity and rising land prices that contribute to growing competition amongst men (Rao, 2005; Chowdhry, 2011). In instances where women in wealthier households are given land in their names, in order to avoid estate taxes or the land ceiling structure as mentioned earlier (WGWO, 2004; Chowdhry, 2011; Rao, 2012), they have little control in practice.

### Conclusions: women’s rights to land and gender equality

Any discussion of women’s rights to land and gender equality in India must be situated against the backdrop of widespread malnutrition and persistent rural poverty, including land poverty, along with women’s increasing representation in the agricultural labour force, and their growing presence as household heads in rural areas. Size differences between men’s and women’s fields are small, and over 70 percent of female headed households and 65 percent of male headed households have less than 1 hectare of land. Amongst female headed households, 57 percent work on inherited land although 20 percent have purchased homestead plots. Seventy percent of male headed households work on inherited land. Women’s channels for asset acquisition, especially land, are limited, though these vary across Indian states and social groups. Despite legislation supporting inheritance rights for women, where families, kinship groups or communities do not recognise these rights, it is difficult for women to act on them. Equally, markets do not work for women, given their initial lack of resources for investment. Rather they often serve to dispossess women owners. In this situation, state policies, including state transfers of ‘new’ resources that are not contested, at least at the time of transfer, are crucial for transforming the situation of women.

An enabling environment in terms of equitable laws and affirmative action policies are an essential starting point for change, but legislation alone is inadequate. There is need for a fundamental reorientation of policies that recognise women as independent farmers rather than household helpers. This would then entail understanding women’s needs and priorities in terms of crop choices, labour requirements and, indeed, asset access. While keen to enhance productivity, their priorities may at times reflect household food security needs, or choices that reduce the seasonal intensity of labour, as they are producers, but equally responsible for household reproduction. In a large country like India, where the problems of implementation are huge, this can only be realised by a combination of bottom-up action and top-down responsiveness. An active civil society that contributes both to public awareness and mobilisation, as well as the sensitisation of the bureaucracy and ruling elite, has demonstrated that this task is difficult, but not impossible.

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News from the Field

The CGIAR: its research and development partnership

Maggie Gill, Chair of the Independent Science and Partnership Council (ISPC) of the Consultative Group for International Agricultural Research (CGIAR), in conversation with Christine Okali.

As an independent body, the job of the ISPC is to serve as an advisor to the System Council (the funders of the CGIAR) on science and research matters, including strategies for effective partnerships along the research for development continuum.

My six years with the ISPC have coincided with major changes in the way in which research is organised at the CGIAR system-level. The portfolio of research was designed around twelve CGIAR Research Programmes (CRPs) and three ‘Platforms’ which are delivered by CGIAR researchers working with well over 1,000 partners. Together they contribute to the three System Level Objectives (goals) of reducing poverty, improving food and nutrition security, and improving natural resources and ecosystem services. All are linked with the Sustainable Development Goals (SDGs) and all address four cross-cutting themes which include “ensuring gender and youth equity and inclusion”.

This portfolio follows on from the first Strategy and Results Framework of the CGIAR which was developed in 2010, providing an overarching structure for the combined work of the CGIAR centres, delivered initially through fifteen CRPs.

A system-level Gender Strategy was devised in 2011 to assist the CRPs to address their gender goal. By 2013, the need for more research capacity in the social sciences was identified (refer to the on-line CGIAR Gender Research Action Plan Overview).

My first conversations with the editorial team of this Ag4Dev Special Issue on Women in Agriculture focussed on CGIAR progress with its gender research, and especially on the disciplinary composition of our body of gender researchers. We also discussed gender sensitivity of technologies being researched, such as farm tools.

In relation to the disciplinary composition of our researchers, although the number of social scientists with the capacity to undertake the gender research has increased, the ISPC thinks that more are needed. Some ISPC conversations and discussions have been about the best way of using this capacity.

On technology and farm tools, and especially the call for gender aware technology, I noted at the time the value of ergonomic criteria in tool design, and in our more recent conversation, the role of robotics, and of the value of certain kinds of tools for small farms and plots. I spoke of the variability in context, thinking of humid tropics as compared to drier areas with less trees and potentially greater scope for larger tools. And, of course, as in parts of Europe and no doubt elsewhere, farmer groups, rather than individual farmers or farm households, can control more expensive and possibly larger farm tools that they can loan to members. There are obviously ways round the problem of tool ownership for farmers with small plots.

We continued with a more recent conversation on research focus and related methods.

ISPC have been very supportive towards the creation of the CGIAR System-wide Big Data Platform (http://www.cgiar.org/about-us/our-programs/cgiar-platform-for-big-data-in-agriculture-2017-2022/) which aims to “democratize decades of agricultural data empowering analysts, statisticians, programmers and more to mine information for trends and quirks, and develop rapid, accurate and compelling recommendations for farmers, researchers and policymakers”.

At the same time, the ISPC has considered the interface between researchers and decision-makers (eg farmers, policymakers and the private sector). Do decision-makers really understand what questions can best be answered by research, and do researchers really understand what questions decision-makers want answered? What evidence is there that research outputs will be taken up? ‘Theories of Change’ within proposals are one way in which this is assessed ex-ante, but what lies behind their development? Have gender equity issues been adequately considered? Over the lifetime of the first phase of CRPs, the ISPC has seen positive progress with respect to how gender equity is addressed within the CRPs, and awarded a ‘strong’ rating to the Cross-System initiative on gender research and co-ordination submitted in 2016.

The current gender research programme of the CGIAR is very ambitious, but is important for achievement of the SDGs to which most research and development organisations are now committed. In terms of a CGIAR commitment to developing a credible gender research capacity, gender research is not new to this organisation. At the same time, the ISPC is aware that this CGIAR is a much more complex organisation than it was when it began its gender-focussed research in the early 1980s. Nevertheless, it continues to make progress in ensuring that gender equity and inclusion are embedded in the design of agricultural research.

Maggie Gill

Maggie Gill trained as an animal scientist. She has worked as a research manager/science adviser since 1994; and in 2011 she joined the ISPC of the CGIAR. She took over as ISPC Chair in 2014.
The piper calls the tune: changing roles of Northern Ghanaian women in agriculture

Eileen Bogweh Nchanji

Abstract

In sub-Saharan Africa, farming largely takes place on land that is mainly owned and controlled by men. Women have access to land largely through kinship relations that are guided by socio-cultural institutions such as inheritance, marriage, as well as community allocation. Even though agriculture in Africa has often been referred to as a woman’s activity with more than 50 percent of women taking part in it, the situation in Tamale, Northern Ghana is different, as more men than women are involved in most productive agricultural activities. Here, women are mainly engaged in harvesting and marketing – roles conditioned and reconstructed by the culture of the Dagomba people who populate the Northern Region. However, women are still expected to meet their traditional household reproductive and provisioning responsibilities, by providing nutritional and household care services. They have traditionally done this through their harvesting and marketing roles without necessarily needing land ownership.

This article shows how the introduction of a national gender-sensitive agricultural policy has changed ownership and access mechanisms to land for women in irrigation sites, increasing the number of women now involved in agricultural production. Women in urban and peri-urban areas now own and control land for farming at government irrigation schemes. Women with no access to land through kinship relations, markets or the state have also developed other strategies to secure food for their homes and generate income. These involve joining friends to harvest commercial crops (rice), and protein-enriched crops (groundnut) that they consume, and sell to take care of other household needs.

Introduction

Agriculture is the backbone of most sub-Saharan African economies and women are considered key players in this sector (Fleschenberg et al., 2011). However, a widely shared notion that women are responsible for 60 to 80 percent of food production and contribute 40 to 90 percent of agricultural labour (Momsen, 1991) has recently been questioned by Doss (2017) and Christiaensen (2017). Palacios-Lopez et al. (2017) agree that there is a wide variation in the proportion of agricultural labour contributed by women across many countries, and estimate an average figure of 40 percent. SEND-Ghana (2014) estimates that Ghanaian women contribute more than 50 percent of agricultural labour, and produce more than 70 percent of the country’s food stock. Women are described as mostly being involved in subsistence agriculture, food processing and distribution to take care of their basic and nutritional family needs, while their male counterparts deal mostly with cash crops and use the money earned for other purposes (SEND-Ghana, 2014). The myth that men and women exclusively grow different crops is now being debunked, as Doss (2002) and Nakazi et al. (2017) have shown in their works on Ghana and Uganda respectively.

In Northern Ghana, agriculture is male-dominated, while marketing is female-dominated. This division of labour and activities is a result of local customs which are continually being reshaped and restructured by male-dominated institutions such as the chieftaincy and community councils. In this society, a husband is expected to farm and provide for his family, while a wife (or wives) is supposed to sell agricultural products or clothes to assist her husband. Women are also expected to fulfill their reproductive and traditional provisioning role of providing vegetables for household nutrition. Men, for their part, own and control lands to which women have access, and provide staple foods such as cereals and tubers, which are eaten with the vegetables provided by women. The land tenure system in Northern Ghana is pluralistic. Chiefs have ‘allodial’ rights (ownership of real property that is independent of any superior landlord and related to the concept of land ownership by occupancy and defence) to three quarters of land and are expected to manage the land and through it develop the community. The ownership of land by the traditional rulers has contributed to men’s exclusive control over land, as most chiefs are male. In this situation, men are ‘playing the tune’, and women are using different strategies to be able to fulfill their social obligations in the household and community while ‘dancing to this tune’.

The agricultural system in Northern Ghana was described by Benneh (1968) as semi-subistence: with shifting cultivation, bush fallowing, along with burning prior to cultivation being common practices, all undertaken by men. Although these practices remain visible in some places today, it is rare to see them in rural locations close to urban centres where land pressure has increased. Nevertheless, the ability of women to
fulfil their subsistence roles relies on the work of men, through whom women gain access to and maintain control over different natural resources such as land and trees. In this way, it is clear how the identity of women as subject to men and controlled in all they do by men, has been constructed by male-dominated institutions. These constructions or framings greatly influence the agricultural system prevalent in Northern Ghana today. Failed agricultural interventions in this region have frequently been attributed to a lack of synergy between different institutions working in the region, farmers’ slow uptake of technology and women’s limited access to productive resources (Owusu-Baah, 1995). SEND-Ghana (2014) refers to the lack of gendered practices as ‘constraints’ leading to project failures. By the mid-1990s, in an attempt to boost agricultural productivity in the Northern Region, the Ministry of Agriculture introduced what had become known as ‘gender-sensitive agricultural policies’. One of the objectives of these policies aimed at increasing the number of women on irrigation schemes in order to improve nutrition and food security in the region. Such policies were and continue to be justified by data provided by the Food and Agriculture Organisation demonstrating that if women have the same access to productive resources as their male counterparts, they will be able to increase yields by 20 to 30 percent, which will, in turn, reduce hunger by 17 percent (Food and Agriculture Organisation, 2011).

This article uses evidence from ethnographic data to show how women’s roles and strategies in carrying out agricultural activities have been changing as a result of different ‘tunes’ being played by multiple actors. It examines how these ‘tunes’ have enabled women to re-shape their productive and reproductive roles, and also their positions in the household and community. It will, in the end, ask whether changes in the roles of women in agriculture benefit their families and communities.

Conceptual framework

In this article, women’s identity and roles are conceptualised as being constructed through and performed in their everyday activities, sanctioned by societal expectations and taboos, socio-political changes and cultural norms (Greco, 2013; Smith, 2016). Roles are constructed through social interactions, guided by what people say and do and how they act (Greco, 2013). Performance in this context is more than a single act, and rather a repetition or ritual which sometimes changes as one interacts with others (Butler, 1990). Northern Ghanaian women’s roles in agriculture are constantly evolving, and these changes are shaped by cultural norms and (gender-sensitive) government agricultural policies, which are also redefining how agriculture is practised and performed by women and others around them.

As socialisation has continually shaped the role of women, it has maintained power imbalances between men and women, in that men have control over productive resources such as land, and women can only access these resources through them. It should be noted that this is not the same everywhere, as variations do abound. Land is especially important in this article, as it symbolises power and prestige for men in the study context. In contrast, women’s access to land is conditional: women are expected to negotiate and bargain for its use.

Methodology

This article draws on the findings of an ethnographic research programme carried out over two years in Tamale, the capital of the Northern Region of Ghana, and its environs (Nchanzi, 2017). It aimed to understand the socio-political configuration through which resource flows are channelled towards urban farming, both to production, and later, marketing activities. As a Cameroonian woman who grew up farming with her mother, assisted every once in a while by my brothers, I was surprised to find mostly men farming in Tamale. I was intrigued, and decided to study the gender dynamics inherent in the agricultural system practised in Northern Ghana. I carried out informal talks with farmers to understand why more men were farming than women. After this, key informant interviews were carried out with executives of the farmers’ union, agricultural officials at the Ministry of Agriculture, irrigation officers and members of women’s groups. Focus group discussions were carried out on all vegetable farming sites in Tamale to triangulate and validate data collected from interviews and informal conversations. All interviews and focus group discussions were conducted and recorded in the local language, Dagbani, with the assistance of a translator. These recordings were further transcribed into English using f4 transcription software.

Study area

Tamale metropolis is said to be the fastest growing city in West Africa (Ziem, 2013). About three-quarters of its population reside in its urban area (Ghana Statistical Service, 2014). It is the commercial and educational hub of the Northern Region, with more than 80 percent of the population carrying out one form of agriculture or another (Ghana Statistical Service, 2014). Tamale is the seat of the Dagbon Kingdom, with about 80 percent of the land being customarily owned by chiefs, and the rest comprising public lands used to build structures that serve public needs such as markets, hospitals and schools (Ubink & Quan, 2008). The chief is the alodial owner of the land, with a social obligation to develop the community with earnings from land ‘sales’ or allocations. Lands are typically allocated or leased to men, but in contemporary times, land can be allocated or leased to a woman if a male kin member accepts to represent her. However, this rarely happens, as men feel threatened when women own land, because this could easily change their fundamental role and status in the household and community.

The household head of a Dagomba family is a man, and he manages a compound which could be made up of his married and unmarried brothers, uncles, nephews or sons, and their wives and children. The household head decides how land is accessed and how cereals and tubers are consumed or sold. He measures out portions of cereals or grains and gives them to any female in the household assigned to prepare food for the compound at a given time.
Discussion

Changes in agricultural policy and in the socio-economic and political environment in Tamale are reshaping the role of women in agriculture. Women are employing traditional and new strategies to secure space in the contemporary agricultural sphere, during different farm seasons. Most of the old strategies used by women are embedded in longstanding socio-cultural norms relating to land ownership and control. New and emerging strategies draw on recent government agricultural policies influenced by transnational governmental interventions (Ferguson & Gupta, 2002), adapted to the local setting.

Traditional strategies

Traditionally, in the northern part of Ghana, land ownership is in the hands of men and not women, as mentioned above. The reason is that when a woman marries she belongs to a new family, and so forfeits all she had to the natal family because any property she owns will automatically belong to her husband. A man can own land because when he marries, his property does not go to his wife’s family but stays with him, for it is through him that the family name and legacy live on. Land is considered a spiritual being and its care is usually in the hands of household heads, chiefs and earth priests, who communicate with the ancestors through rituals for the land to be fruitful.

Family, marriage and inheritance

Married and single women enjoy usufruct rights to land (the right to enjoy the use and advantages of another’s property), unlike men who own the land. Family lands do exist and cannot be taken over by chiefs, some are registered and titled. Men also gain access to lands through clan membership. These lands are protected by elders in the clan from being allocated for other purposes by the chief. Lands which belong to clans are not allocated to people outside the clan. These lands are inheritable and passed over to sons or other male family members. There still exist communal lands which can be leased out for other purposes by the chief without informing the farmer cultivating such a land (Nchanji, 2017). Unmarried and married women have access to land through their male relatives, via marriage and inheritance, as well as from the wider community. These lands are usually around the homestead or are less fertile lands not used by the household head during the major rainy season farming period. Plots of land at the edges of the family land can also be allocated to women, for growing vegetables that will be eaten alongside staples provided by men (Nchanji & Bellwood-Howard, 2016). When a woman is given a plot of land to farm, she maintains access to it through continual farming: if she stops farming the land will be allocated to another woman. Thus, to fulfil their traditional provisioning roles, women grow and harvest vegetables during the wet season from their fields and dry them for soup preparation in the dry season, especially in rural areas where dry season farming is not practised. In this way, they maintain their role in agriculture and fulfil their reproductive roles as care-givers.

Married and unmarried women are not limited to accessing land through their kinsmen since they can also gain access to land from other men in the community, especially older men who, it is sometimes claimed, give out more fertile lands. Women hardly ever grow grain on their plots of land. Rather, women who participate in harvesting grain from their husband’s or other men’s fields are compensated with a basin or two of whichever grain is harvested. The rest of the harvest is under the control of the man; he decides on what will be consumed and sold, and gives a proportion out to the woman who is cooking for the household, as described above. Yet women sometimes need more grain to cook food for themselves or the children when the grain provided by the household head is not enough. So, while harvesting grain from their husband’s fields, they intentionally leave some behind, and return to collect it later for personal use.

During the dry season, most women are not permitted to assist their husbands or male relatives in their fields. This is because women are assumed to lack the technical expertise and skill needed to grow most of the dry season vegetables such as lettuce (Lactuca sativa), cabbage (Brassica oleracea var capitata L), green pepper (Capsicum annuum), onion (Allium cepa), and okra (Abelmoschus esculentus). Some women are permitted to assist in irrigating the vegetables, particularly when basins are used to carry water on the head, while some farmers let their wives or sisters contribute to building fences around the crops to deter animals. Yet the main role of women in dry season farming is to buy these vegetables from the farm gate and sell them in the markets. Women’s control over market transactions is so strong that male farmers who tried selling directly in the market spaces made losses, and so complained that they have no choice than to sell to women (interview with farmers at Daitoyili, 2014). Most of the men I interviewed do not harvest vegetables and bring them home to be prepared; they prefer to give money to their wives and sisters to buy vegetables in the market. Interviews revealed that male farmers used this strategy to keep women out of their agricultural activities, to ‘own’ the decision-making process in producing vegetables.

Widows are treated differently, depending on their age and clan membership. Young widows are encouraged to marry again. If she agrees to marry, her children will be given to her late husband’s brothers to train, and they will, in turn, inherit the
brothers’ property. If the young widow has a male child and refuses to remarry, her son will inherit his father’s property (including land), and in this way, she will continually have access to this land. If the widow is old, her first male child will look after her and inherit his father’s property. If the old widow does not have a son, she forfeits her husband’s property, except the kitchen utensils. During harvest periods, she will gather leftover grain from any field around her which is possible, because customarily farmers are not permitted to pick all the grain from their fields, but leave some for those who do not have any land to glean.

Women who have access to lands can also seek permission to use the economic trees present on it, such as the Shea tree (Vitellaria paradoxa), Dawa Dawa tree (Parkia biglobosa) and Neem tree (Azadirachta indica). Sheanuts collected from the shea trees can be sold or used in making shea butter, used for cooking and cosmetics. The pollen of the Dawa Dawa tree is used to make porridge and the seed is processed into a food spice. Neem trees can always be cut down and sold as firewood to generate extra income. Traditionally all Dawa Dawa trees in community areas can be accessed by women by seeking permission from the sub-chief who owns all Dawa Dawa trees. As explained in the Box 1, women play multi-faceted roles in the agricultural context. These roles vary and change depending on customary expectations, agricultural policy, farm seasonality and also the preferences of the household head.

**Box 1. Northern Ghanaian women’s multi-faceted roles in agriculture.**

Amina lives in a community close to the Bontanga Irrigation Scheme. She is married with children and assists her husband on his fields during the rainy season. She has been allocated a plot at the edge of the husband’s field to grow vegetables to supplement staples provided by the husband. During the dry season, she is not permitted to work on her husband’s plot, because the crops grown, like okra, green pepper and onion, need technical expertise which the husband says she lacks. During the dry season, therefore, she joins others to harvest pepper and onion from irrigation plots rented by immigrant farmers from Bawku (Upper East Region) who pay them with some of the crops they harvest. Amina uses these to prepare vegetable soup for her household and sells any excess to meet other household needs.

**Contemporary strategies**

Rapid urbanisation in Tamale has led to a lucrative land market, and chiefs are taking advantage of this by leasing out agricultural lands that are communally owned, for commercial and housing purposes (Naab et al, 2013). This has influenced the viability of some agricultural activities, especially the production of dry season vegetables. Open space vegetable sites used for dry season farming, for example, were reduced in size by 8.3 percent between 2008 and 2014 (Nchanji et al, 2017). The decrease in agricultural land has limited women’s access to communal lands and their ability to continually access food for their families (Nchanji & Belwood-Howard, 2016).

In the contemporary era, while household dynamics still influence women's access to land for vegetable cultivation, it is national agricultural politics and transnational interventions that have come to the fore.

**The Land Administration Project**

The Land Administration Project (LAP) was introduced by the Government of Ghana and other multilateral organisations to harmonise land policies, strengthen land administration management systems and provide fair and equal access to land for everyone. This project was carried out in two phases. The first focussed on creating and strengthening customary local secretariats to reduce land ownership conflicts. The second phase had, as one of its objectives, the promotion of equitable development in land administration, as it pertains to the concerns of men and women (Ghana Land Administration Project, 2017). This gender-focused objective was integrated into this project to meet one of the aims of the National Gender Policy, namely, providing information to women on how land can be bought and registered. The LAP provided another opportunity for women, especially in the urban areas, to buy and register land in their names. Yet, this in fact had a detrimental impact on agriculture, as most women in urban areas chose to purchase land for accommodation and commercial purposes rather than for agriculture. Many rural women would love to purchase land but are limited due to lack of credit, compounded by the expensive procedure entailed in registering a plot. Thus, while projects like the LAP are vital in harmonising land policies and laws, they have failed to increase women’s access to farm land as women with funds prefer to invest in other forms of capital.

**Government Irrigation Schemes**

Government irrigation schemes in the Northern Region were created in the 1970s with the aim of boosting agricultural productivity by providing a perennial water source, which is scarce in this region (Nchanji & Belwood-Howard, 2016). This section looks at two main irrigation sites: Golinga and Bontanga Irrigation Schemes. In the 1990s, after the retrenchment of irrigation personnel, participatory irrigation management schemes were put in place in an attempt to decentralise and thereby make sustainable the management of irrigation schemes in Ghana (Braimah et al, 2014). Plots on these sites were allocated to indigenes and outsiders interested in farming. Plots of land were initially allocated only to men, but this has now changed. Gender-sensitive agricultural policies such as the National Irrigation Policy and the Growth and Poverty Reduction Strategy II (Lamptey et al, 2011) have encouraged the incorporation of women into Farmer Based Organisations (FBOs) in these schemes. In 2012, there were only 11 female farmers compared to 514 male farmers in FBOs at the Bontanga scheme; while at the Golinga scheme there were 12 female farmers and 138 male farmers in the FBOs (Braimah et al, 2014). By 2015, there was a substantial increase in female farmer membership in the FBO in Bontanga (24 percent) and Golinga (25 percent): in both the Bontanga and Golinga schemes, 19 percent and 20 percent of women respectively access their husband’s plots or that of other male relatives (Figure 2) (Adongo et al, 2016).

According to my interviews in the field, the increases in the number of women in FBOs and plot holders on behalf of their male relatives and husbands are a result of incentives given to male farmers to involve their wives and sisters in irrigation
activities. These incentives came in the form of seeds, fertilisers and other inputs, donated by organisations such as the United States Agency for International Development (USAID), for use on farmers’ fields and demonstration plots in different projects. This practice has created another route through which more women can be involved in agriculture.

Through the efforts of USAID and local organisations, women from Golinga and Gbelahigu communities have also been allocated about six acres of land around the edges of the Golinga irrigation scheme to farm (Nchanji & Belwood-Howard, 2016). These plots of land are owned and controlled by the women as a group. The chairman of the Golinga Irrigation Scheme informed me that more women are also now involved in dry season vegetable cultivation at the irrigation site due to competition between spouses to provide food at the household level and achieve new status in the communities, as detailed in Box 2.

Box 2. Women’s changing status and identity.

According to the chairman of the Golinga Irrigation Scheme, men encouraged their women to farm at the irrigation sites due to the incentives they got from multilateral organisations, but not all women were interested in this offer. When the few women who farmed started providing more nutritious food, clothing and education for the children in their households, others became interested. They also wanted to be able to sponsor their children and fulfil their household roles like the others. Women who went this extra mile were praised and respected by men in the communities and became the envy of their mates. This change in status and identity has pushed more women to come into farming. I remember how with pride the chairman showed me the only woman in his community who grew cabbage, a crop assumed to be too technical for a woman to cultivate. Maybe the men do not feel threatened because vegetables are not considered a prestigious crop compared to rice which is still male-dominated. Presently, women who do not have lands to farm at the irrigation site from their male relatives or the irrigation officers, negotiate land access with any male farmers in the community ready to give out their lands during the dry season.

Other means

Urban women, who do not have access to land, because they have moved out of their villages where they could access land through their male relatives, have developed other ways of sourcing food resources. These women usually assist their friends, or the relatives of their friends, in harvesting crops of nutritional and economic value. Some of these crops are rice, groundnuts and vegetables. After harvest, when these women collect their portion as compensation for assisting in this agricultural activity (Figure 3), the rice is mostly sold to obtain money with which to provide for household needs, and the vegetables and groundnuts are consumed at home. The women working in this way indicated that even if they got access to land on which to farm, they are limited by lack of finance in accessing fertiliser, seeds and other inputs needed in any agricultural activity. Thus, having access to land does not guarantee food production as inputs, time and energy are needed to produce food from this land.

Conclusions

Development and academic discourse emphasises the productive role of women in agriculture. Yet women play several different, critical roles in the sector beyond production of crops, through which they fulfil reproductive roles and contribute to food security. Crucially, they do not necessarily depend on direct agricultural production or ownership of land in order to do this.

Northern Ghanaian women have been socialised to be caregivers and marketers. Their main link with agriculture has been selling vegetables bought at the farm gate from male farmers, and sourcing the vegetable accompaniments to staples provided by men. Customary ideas about women’s
roles in food provision have served to concretise and institutionalise these agriculture-related roles. In recent times, these roles have been changing as a result of agricultural policies which have not only increased the number of women farmers on irrigation sites, but also made some of them land owners.

Though women still mainly access land through kinship relations, the traditional ‘tune’ played by the male piper is being supplemented by other players: the international development organisations and national policy makers. The ‘dance’ of the women has thus changed. They are now using additional unconventional mechanisms that involve the state, social relations and markets to access land, generate income, and provide food and nutritional security for the household. This change has not only reshaped the way agriculture is practised in and around Tamale, but it has also changed household dynamics and, related to these, women’s identities and gender relations. Such processes happen not only in Northern Ghana but cut across Africa and the world.

References


The CGIAR Collaborative Platform for Gender Research

Rhiannon Pyburn is a Senior Advisor on sustainable economic development and gender at the Royal Tropical Institute (KIT) in Amsterdam and, since January 2017, the Coordinator of the CGIAR Collaborative Platform for Gender Research. Rhiannon worked closely with the CGIAR Research Programme on Livestock and Fish (2014-2016) supporting gender integration in livestock and fish research, co-developing the 6-year phase 2 proposal in relation to gender, and sat on the Programme Management Committee. Over the last 20 years, Rhiannon has worked and published on gender dynamics in agricultural development, agricultural innovation systems, and social and environmental standards and certification.

January 2017 marked the beginning of a second phase of CGIAR research programmes, and with it the start of one of the four system-wide platforms, namely the CGIAR Collaborative Platform for Gender Research. The Platform builds on the foundation of the CGIAR Gender and Agriculture Research Network which started up in 2012 as a way to build the community of gender scientists from across international agricultural research institutes. The focus of the Gender and Agriculture Research Network was primarily on knowledge sharing, capacity building and support to gender scientists. Building on this, the mandate of the Platform is four-fold:

1) to increase the visibility, profile and appreciation of gender research both within CGIAR and beyond;

2) to build up the quality of CGIAR gender research, eg by supporting knowledge-sharing to promote joint approaches and methods, capacity development and fostering adherence to minimum standards for sex-disaggregated data collection and analysis;

3) to assess and support cross-CGIAR gender research priorities and identify gaps;

4) to foster and catalyse strategic partnerships.

Monthly webinars, quarterly newsletters, periodic blogs on engendering data and methods, annual campaigns on International Women’s Day and the International Day for Rural Women, and an annual scientific conference and capacity building workshop, are amongst the key activities of the Platform. For details see our website.

The Collaborative Platform for Gender Research sits within the CGIAR Research Programme on Policies, Institutions and Markets (PIM), but serves all CGIAR research institutes and research programmes. However, in order to make sure that all agri-food system research programmes (Maize; Wheat; Rice; Fish; Livestock; Forest, trees and agroforestry; Roots, tubers and bananas) and all global integrated research programmes (Water, land and ecosystems; Climate change, agriculture and food security; Agriculture for nutrition and health; Policies, institutions, and markets) are reflected in the work of the Gender Platform, we have put in place an Advisory Committee. The Advisory Committee has two representatives from the seven agri-food system research programmes, one from the four global integrated research programmes, an external advisor, and a PIM management unit representative. In this way, we ensure that the gender scientists from across the CGIAR system are providing input and direction for the Platform despite funding for operations being channelled through PIM. Additional activities and cross-CGIAR gender research need to be supported through bilateral arrangements. Both system-wide participation and sufficient resources for cross-programme gender research are critical for the success of the Platform.

The role of the Platform is not to lead or direct gender research from across the system, but rather to draw out higher level questions that are relevant across domains, and support exploration of these. Each separate research programme has its own domain and the gender research specific to that domain is led from there. The Platform is interested in those themes that cut across research programme domains. We are in the process of co-creating a cross-system framework for gender and aqua/agricultural and natural resource management research that captures the breadth of innovative gender research underway.

Several gender communities of practice (CoPs) have arisen in recent years to support specific knowledge areas, including the Gender and Breeding Initiative, the gender and climate change network, and an emerging community of practice on gender and big data. What is exciting is that these CoPs involve both gender scientists and biophysical scientists. Both are breaking new ground together and creating new mind-sets that capture the language and perspectives of the social and biophysical sciences involved.

Part of what we aim to do is to aid in understanding the process of gender integration into biophysical research, something that all CGIAR research programmes are working to improve. For example, in an upcoming book on gender integration, A different kettle of fish? Gender integration in livestock and fish research, analysis of the process of gender integration is based on experience with the CGIAR Research Programme on Livestock and Fish. The book looks at three components of gender integration: sex disaggregation, gender concepts, and diversity and change. It unpacks these categories and explores trade-offs faced in doing gender-integrated research. The problem is raised of biophysical scientists collecting sex-disaggregated data only to be stuck not knowing what to do with it. We look at where gender scientists are required for analysis and interpretation of this sex-disaggregated data and at other steps in the process where gender input is less critical.

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Gender mainstreaming: the case of the School of Veterinary Medicine and Animal Production in the National Autonomous University of Mexico (UNAM)

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Abstract

During the 1990s, gender mainstreaming emerged on the agenda of international and national organisations as a strategy designed to ensure that policies and actions taken to transform the status and position of women were not derailed. Worldwide, higher education institutions that impact on the attitudes and behaviour of their communities were considered central to this change project. This paper centres on three ways in which the National Autonomous University of Mexico (UNAM) has responded to the call to mainstream gender, and reflects on the learning, with emphasis placed largely on a gender training course.

Introduction

Gender mainstreaming, a global strategy

After more than two decades of activities designed to address women’s inequalities, gender mainstreaming was adopted at the global level to counter the “slow progress in equalizing power in gender relations, and the persistent political marginalization of women’s views on the development process, in a wide range of institutions from state bureaucracies and development organizations from multilaterals to NGOs” (Goetz, 1997). From this point on, gender issues were to be brought into the mainstream of development planning and be visible in policies, legislation, programmes, operating rules, and symbolisms, as Gender and Development (GAD) (Incháustegui, 2006; Guzmán, 2008), rather than being side-lined as women’s issues or Women in Development (WID). This mainstreaming of gender issues, adopted at the Fourth World Conference on Women, held in 1995 in Beijing, marked a major turning point in the already considerable global efforts being undertaken to promote the advancement of women. Expectations were high but, as might be expected with a complex programme aspiring to change power relations, at the level of organisations or institutions, reports of slow progress soon appeared, and continue to date. Numerous reasons were given to account for this, from lack of funding for all the activities required to be undertaken, especially training, to long-established organisational cultures which were being protected by senior state officials, who were more often than not, male. On this particular issue of organisational cultures, and on a more positive note, Del Rosario (1997) concludes that “the barrier of state masculinism is not impenetrable” (Del Rosario, 1997). The adoption of the Millennium Declaration in 2000, with its gender goal of achieving equality and the empowerment of women, served to invigorate the action initiated in 1995 to address the disadvantages faced by women in large parts of the world and in many types of organisations.

In response to this, and the earlier calls to mainstream gender, institutions have adopted different approaches over time. This paper is based on the experience of the National Autonomous University of Mexico, and covers three actions taken between 1992 and the present, while focussing especially on one of these: a gender training programme. As will be clear from the descriptions of the three actions, this particular experience is not complete and so it conforms with the description of the mainstreaming process as “a slow revolution” (Davids et al, 2013).

The choice of this particular institution for this paper is not intended to suggest that its experience represents a successful attempt to comply with some agreed mainstreaming implementation steps. Rather, it is used because, firstly, it demonstrates the reality of mainstreaming on the ground as possibly opportunistic, involving different activities or pathways to change as possibilities emerge, and as a process that may take years to reach the outcomes expressed here. In UNAM, its mainstreaming actions became especially visible in 1992, but may have started earlier, and the emergence of new actions has continued until the present. Secondly, the experience of UNAM is especially valuable because this is one of the most important universities in Latin America with 31 academic campuses spread throughout Mexico, offering a wide variety of educational options at the undergraduate level, consisting of 118 degrees in the areas of Physical-Mathematical Sciences and Engineering; Biological, Chemical and Health Sciences; Social Sciences, Humanities and Arts. It also has post-graduate programmes.

Below, two gender mainstreaming activities of UNAM – a research and a training programme, and a programme of
organisational change – are briefly described before examining in greater detail the gender training programme within the School of Veterinary Medicine and Animal Production with which the author of this paper has been directly involved since the course was first offered in 2009. Details of the official process of gaining course approval and the course content follow, along with student assessments.

The UNAM experience of gender mainstreaming

Since 1992, before the Beijing meeting, UNAM had already officially approved a Research Programme of Gender Studies, to advise on gender policy and related implementation through gender-related projects, in collaboration with other institutes of higher education in Mexico. This was one of the first initiatives of UNAM to mainstream gender although feminists with diverse academic backgrounds were already working within UNAM as teachers and researchers in the 1960s, and by the 1980s they were actively working on women’s issues. We have not looked in any detail at the link between this group and the Research Programme of Gender Studies, but by 2017 the Research Programme was renamed the Centre for Research and Gender Studies – demonstrating a continued commitment to gender research.

Within the School of Veterinary Medicine and Animal Production, as a result of the establishment of a Commission on Gender Equity, a range of different activities were instigated ranging from workshops to the production of written materials, refresher courses for students and staff and, by 2008, the School had taken action to incorporate a gender perspective into its curriculum. By 2009, the first gender study course within the different UNAM schools and campuses was offered as an optional course within this School under the title Gender Analysis in Development. The course consisted of two new optional subjects, one theoretical and another practical, both focused on understanding the Mexican rural economy and society, and links to gender. Together they provided students with concepts, tools and strategies for undertaking social analyses of rural societies, and based on these, to identify programmes, or interventions, in which they themselves might expect to play a role.

Continuing with its commitment to change the institutional culture of UNAM, in 2013 UNAM produced its General Guidelines for Gender Equality in the UNAM calling the university community in all of its different campuses "to take affirmative action towards gender mainstreaming" (UNAM, 2013). The guidelines relate directly to gender equity and gender justice throughout UNAM as follows: promote gender equality among members of the university community, ensure equal opportunities for participation, work towards inclusive language awareness, combat gender-based violence in the workplace and throughout the academic environment, as well as addressing complaints related to discrimination and gender violence. Finally, it called for the compilation and analysis of statistics using a gender perspective. The guidelines are both ambitious and radical, reflecting the ambition of the two international agreements of 1995 and 2000. Its gender mainstreaming policy was conceived as an institutional change programme requiring a culture shift in terms of support for the advancement of women, and their protection. In 2014, the Commission on Gender Equity of the School of Veterinary Medicine and Animal Production was officially established by its Technical Council.

The gender training programme in the School of Veterinary Medicine and Animal Production

Being a pioneering proposal in its conception, design and implementation, the main challenge of the new course introduced in 2009 was, from the outset, to integrate social analysis into the conventional technical training used to equip students for the profession of veterinary medicine and animal production. Both the theory and practical subjects were put together by the two staff members responsible. One of these had completed post-graduate gender training with a PhD thesis on women’s groups involved in small-scale, backyard livestock production in Mexico.

The theoretical component of the course covers seven themes, beginning with an introduction to gender studies, and covering gender perspectives in rural development programmes more broadly: the Mexican rural economy, changing masculinities and women’s participation in agriculture, all with a bias towards conceptualising the social dynamics of rural areas and the agricultural sector.

The practical elements of the course were designed to provide students with the methodological and analytical tools for the study of rural social relations, and especially gender relations within households, communities and key rural institutions. In the field, over two weeks, students first engage with issues around gender in a variety of different organisations, from government and non-government development agencies to educational institutions at different levels. Within each of these the students undertake gender analyses of the organisational structure, staffing and terms of service, their programmes and discourses relating to their work, and the populations they serve, and identify issues around gender mainstreaming. They then turn to rural communities to study livelihoods, patterns of leisure and work, and changing gender relations, gender identities linked with shifts in the local, regional and national economies, population dynamics and culture change. The students conclude by preparing an action plan based on their theoretical understanding.

Course development and approval

Originally entitled Gender Analysis in Development, both subjects were submitted to the Technical Council of the School of Veterinary Medicine and Animal Production, UNAM at the end of 2008 for approval as optional subjects. Given the innovative nature of the proposal with its focus on social and humanistic issues related to gender, Council members wanted to know more about the expected contribution of the course to students of veterinary medicine and animal production. The discussion that followed emphasised firstly the value of understanding rural society, the space within which a majority of the students were
expecting work after completing their studies, and secondly, the contribution that such a course would make to the gender mainstreaming project within UNAM. The course was approved and the Council agreed to provide the necessary political support. The first students were welcomed in 2009 to the course that by then had the new title Participation of Men and Women in the Rural Sector, as suggested by the Technical Council of the School (FMVZ, 2014).

Since its approval, the course content has been modified in line with changes in agricultural policy and shifts in the small-scale livestock systems of production managed by families. For instance, in 2009 when the course started, support for microcredit projects for women’s groups involved in vanilla production, livestock production, and lemon and horticulture cultivation was a major agricultural policy both internationally and in Mexico. The policy was limited to women, and men were not presented as needing to group together to improve their situation. The policy itself and its assumptions about gendered needs formed an important focus of the gender training within the practical studies programme. However, since the start of the course, in Mexico at least, the strategy for agricultural development has shifted to focussing on individuals as opposed to groups, with significant implications for small-scale systems managed by families. Unlike cattle production, detailed briefly below, backyard livestock production itself has hardly changed over the years.

More recently, there have been changes in cattle production that are impacting on the way in which women can contribute to livelihoods. Consequently, land that was in the past mostly devoted to field crops and dual-purpose livestock production, and in which women were able to participate by producing artisanal cheese for example, is now used for ‘extensive husbandry’. Within this system of livestock production men perform most of the activities, with cattle fattening taking place as a separate enterprise. This shift is not about a shift from small-scale to large-scale production, but rather a shift in production systems that has implications for the way in which men and women are able to negotiate around activities that enable them to fulfill their household obligations, while also meeting their personal needs.

Student registration and reflections

Low student enrolment in this course, especially by men, reflects the established disciplinary separation of social and technical sciences within UNAM: out of a total of 10,600 students registered with the School of Veterinary Medicine and Animal Production between 2009 and 2016, only 1,052, or approximately 10 percent, elected to take both the theoretical and practical subjects. Sixty-two percent of these students were female. This suggests that the decision of UNAM to institutionalise gender training within its various campuses might need to be presented as a necessary, rather than an optional, course if it is to have any wider impact, or possibly even to change its title. Students who participated indicated a preference for the course being limited to those who had demonstrated a commitment to making the course a success, ie they deliberately chose to take the course. From its introduction in 2009 until the present, students assessed both subjects to be valuable for their personal and professional development. Below are some of their thoughts:

“Hopefully, this subject will be taught as a main subject since it not only serves the rural or agricultural environment, but also for daily life, in the city, in the school, and in the family. The gender perspective is universal and therefore very important” (Erika, 2009).

“It seems to me excellent that the syllabus of our bachelor degree includes humanistic subjects, due to the close contact that the veterinarian has with the population. In addition, the image of the veterinarian as ignorant with no outside intellectual or social interests must be removed from the mind of society and the veterinarians themselves” (Francisco, 2010).

“I liked the course because it gave value to our opinions. In addition, different points of view were presented which was enriching for the class and provided knowledge and experience to all. Looking at the agricultural sector through a gender lens gave me a surprising understanding” (Diego, 2011).

“An interesting course, even super interesting, and I hope to see this subject soon as a main subject since what was learned can be applied to daily life as well as to my professional life. It helps us to be better people, to value both women and men and the relations between us, and to seek equality” (Manuel, 2012).

“This subject opens the panorama and allows me to see features of society that previously I did not pay attention to or notice. Now, I feel a commitment to help gender equality be greater in at least my close circles and share the information that this subject has provided” (Rodrigo, 2014).

“I knew that as veterinarians we must have contact with the livestock owners. Of course I knew that, but the practical course opened my mind to the importance of understanding the livelihoods of rural people and how women and men work, the divisions of labour, and gender roles” (Alberto, 2016).

Although these student views do not necessarily reflect the opinion of all those who participated in the course, they provide some indication that the course widens the understanding of the students about the agricultural sector and the people on whom its success relies. Equally, one of the major challenges of gender mainstreaming within academic institutions is how to incorporate the gender issues in programmes and curricula of the various disciplines of knowledge (see the Journal of International Development 2013 for a number of papers relevant to this discussion) and I return to this in the conclusions below.

Conclusions

Gender Mainstreaming?

Although the gender course Participation of Men and Women in the Rural Sector within the School of Veterinary Medicine and Animal Production may not have any obvious transformative potential in the sense of achieving gender equity and women’s empowerment, it provides some basic considerations of gender relations in the context of livestock
production systems managed by rural families, rather than individuals. It does present gender relations within marriage as power relations, in the sense of winners and losers as systems change, yet these are also evident as relations of affection, where the men and women involved have joint interests, in livelihood security and in the welfare of present and absent family members. Understanding the complexity of these social relations that go beyond simple descriptions of gender roles as ‘breadwinners and homemakers’ (Rao, 2012) is central to understanding how decisions are taken, the way contributions of different family members are understood and appreciated by others, and possibly therefore, the desired outcomes of agricultural activities that likely go beyond increased production and productivity.

Challenging the understanding that male and female identities are fixed and non-negotiable would seem to be central to a course that situates itself within an agricultural setting where migration, along with policy shifts, has unsettled widely accepted roles and related expectations, even if this has not been acknowledged as having happened. The inclusion of masculinities within this programme places social relations and identities, and role shifts responding to different circumstances, centrally.

This focus on people rather than livestock and related technologies is the purpose of this course, and its attraction: it enables students to see how gender works, to put it simply. This would also seem to be essential if we are seeking to change women’s lives – a transformative rather than a bureaucratic process. How can the students of veterinary medicine and livestock production participate in this change process if they are unable to analyse what is happening, and appreciate this in the context of what they already know? This understanding would not have been possible had the training been a one-time event consisting of no more than two training days, a format that has been assumed to be an adequate starting point for implementing gender mainstreaming. At the level of UNAM and its commitment to changing the culture of the institution, gender training is already viewed as a necessary first step. However the brief gender training noted above is hardly likely to be visibly related to the specific interests of the different academic and research interests of UNAM.

I am not suggesting that this paper reflects an exhaustive analysis of UNAM’s ongoing experience of implementing a process of gender mainstreaming. It has centred on what Moser & Moser (2005) have referred to as “the operational and programming elements of one specific activity”. However, now, after almost a decade since the course was first ‘imagined’, would seem to be a good time to review the experience to date, with one objective being to increase student numbers within the School of Veterinary Medicine and Animal Production, the other being to develop similar courses but adapted to the specifics of other UNAM Schools and campuses. The challenge presented by such a mainstreaming effort, apart from practical concerns of qualified personnel and other resources, is likely to be one of establishing the relevance of such a course in other Schools and redesigning the content to fit local circumstances.

References


News from the Field

Reconfiguration of Mexican rural economy and families: grandparents, guardians and caretakers

Introduction

Mexican rural communities have long been connected with international markets for their agricultural produce, and are therefore familiar with the impacts of price fluctuations on farming lives and livelihoods. This item features these changes in rural economies, along with the struggles of rural populations to build livelihoods through migration, in one village in the State of Veracruz. Here, the agricultural economy now centres on small-scale backyard livestock production, while the rural population has aged, yet become more central to the survival of this rural space and its economy, as well as to the success of migration strategies. The article begins with an overview of broad rural economy shifts in the State, and then moves to the ejido of Rafael Valenzuela. The term ejido is the title given to community beneficiaries of the 1917 agrarian reforms under which ejido land was collectively owned and farmed until 1992, when it became private property and the ejidatarios were entitled to sell, rent, or buy ejido land (Nuijten, 2003).

A Mexican agricultural context and the migration phenomenon

Historically, the State of Veracruz received immigrants from other regions of Mexico. However, during the 1990s, this pattern was reversed with Veracruz contributing to national, as well as international, population movements. The Veracruz migratory flows were especially visible in rural areas, where a large proportion of the agricultural labour force had been forced to seek alternative income-earning opportunities outside the State and the country as the rural economy deteriorated (Anguiano-Téllez, 2005). According to official statistics, emigrants from the State of Veracruz formed 3.7 percent of the international flow of Mexican emigrants in 1990, and 6.2 percent in the following decade. Subsequently, its contribution decreased, to 2.9 percent in 2010, and it was no longer visible in 2015 (INEGI, undated).

One key factor that triggered this emigration was agricultural specialisation in specific export crops that characterised a number of regions, and made their local economies vulnerable to price swings in international markets. In the 1980s, the Mexican agricultural sector experienced profound changes, partly as a result of its strong dependency on international markets for sugar cane and coffee, for example. Areas that specialised in the production of these products witnessed economic, environmental and social transformations, as local economies and the livelihoods of agricultural labourers, traders and input suppliers were adversely affected (Hernández, 2006; Nava-Tablada, 2012).

Initially it was men who migrated, followed by single women, who were soon joined by young mothers. A decision that women with offspring needed to take was whether to migrate with their children, or to leave them behind. Such a decision was very important for the whole family because women customarily have taken care of children, meeting what Moser (1989) refers to as the ‘reproductive’ needs of the whole family: food preparation, cleaning the domestic space, clothes’ washing, and care of the sick; while men were responsible for earning cash to pay for necessary household items including medicines and school fees. Given that this behaviour is culturally established and largely accepted in Mexico, if women decide to emigrate leaving their children behind, the children will remain in her parent’s household. Significantly, even if there is a husband or partner, all the arrangements and agreements are completed by the relatives of the wife or woman of the house.

During the 1980s and 1990s, women’s participation in the formal and informal labour market also increased, mainly to support family incomes during the Mexican economic crises when men’s incomes were no longer adequate. Later, the migration of women was driven more by their own individual needs, to have their own personal money, resources or goods, to broaden their horizons beyond their domestic world, and even to improve their education. Women with offspring seeking to improve their income-earning capacity outside their natal rural community would have to choose where their offspring would live and, generally, it would be the woman’s parents, if they were alive, who would assume her maternal responsibilities.

The ejido of Rafael Valenzuela

Older family members have always played an important role in ensuring the welfare of grandchildren and ensuring the transfer of customs, values and local knowledge related to agricultural production and household survival. However, in recent decades their lives have been transformed following the out-migration of daughters seeking paid work in urban areas, often deciding to leave their young children in their natal rural home with their elderly parents.

These transformations can be seen in the ejido of Rafael Valenzuela. The village is situated in the northern part of the State of Veracruz with a population of 676 in 2015. Situated between 20 and 140 meters above sea level, temperatures average between 24 to 26˚C giving this ejido a warm humid climate with abundant rainfall in summer and early autumn. Given its geographic location, it is impacted by tropical depressions and hurricanes that can damage dwellings as well as agricultural production.
To explore the life situation of the elderly parents responsible for their grandchildren, a snowball sampling technique (Goodman, 1961) was used to arrive at a sample of households for data collection. The discussions began with three key informants, who were important sources of information, who provided the names of 14 households. Using a semi-structured questionnaire, interviews were carried out in 14 domestic groups with grandparents, while grandchildren were engaged in informal discussions. Additionally, observations were made of family dynamics while household members undertook their domestic and agricultural tasks. The age of the grandparents interviewed ranged between 55 and 72 years, while the grandchildren under their care ranged between 5 and 20 years.

**Agricultural production and livelihoods**

Since the 1950s, Rafael Valenzuela has experienced periods of prosperity, followed by failure. From the 1950s to the 1980s, agricultural production in the ejido focused mainly on the cultivation of tobacco and vanilla for sale, and maize for self-consumption and surplus sale. During the 1960s, the tobacco plantations were especially prosperous, but at the beginning of the 1970s problems of pests, diseases, storage and marketing reduced its importance. The region forms part of the land marked for the production and extraction of Vanilla planifolia Andrews and Vanilla planifolia Salisbury, but the ejido is facing the challenges of product theft before harvest, competition with synthetic products, and commercialisation (Gutiérrez, 2016). Meanwhile, the State of Veracruz provides agro-ecological niches that favour cattle production and, as a result of the problems with its existing farm systems, in the 1980s the ejido supported the rapid development of dual-purpose livestock production. As might be expected, this shift affected the use of forests and at the same time absorbed labour needed for cultivation of subsistence crops such as rice and beans. By the early 1990s, dual-purpose livestock farming was also facing economic problems (Riaño & García, 2012).

During the 1990s, the lands devoted to agricultural crops and those dedicated to livestock production were converted to citrus production, mostly oranges, followed by grapefruit and lemons; nowadays, the cultivation of orange is the predominant agricultural activity. The harvesting of oranges and grapefruits requires seasonal labour, and even though lemon harvesting employs people more frequently, such activity does not absorb the number of local people seeking temporary or permanent employment. In all the households, small-scale farming still makes an important contribution to livelihoods and contributes significantly to family income.

Facing such economic crises, local people considered emigration as an alternative income earning strategy, and the pattern of migration already noted was followed in this village, beginning with men and followed by women, with the parents of women with offspring becoming primary care-givers. Within Mexico, the main destination for migrants was Mexico City (50 percent), followed by the northern border city of Reynosa in Tamaulipas State (26 percent), where women work as cashiers, traders, teachers at different educational levels, in textile or manufacturing factories, and as domestic help. In the United States, most migrated to North Carolina (17 percent) where they work as domestic helpers – babysitting, gardening or caring for elderly people – as seasonal fruit pickers, and factory workers, amongst other jobs. Those who migrated to Mexico City would return to their natal home between four to six times each year, while those who migrated to Reynosa returned once or twice a year. Others who travelled to the United States have not returned, except in cases where they were found to be illegal residents.

While they expressed mixed feelings about the task they had taken on, grandparents were very clear that they accepted the situation in order to support their daughters:

> “I never imagined I would be child-raising again, but it happened. I have to support my daughter; she is my daughter” (Bella, 59 years old).

Regarding living costs and other economic aspects, grandparents recognised that their daughters sent remittances periodically or left money during their visits. However, they also recognised that frequently the amounts received were not sufficient to cover all expenses. Without specifying amounts, they made up for differences in the cost of maintenance and the amount received. Most of their money comes from their agricultural production:

> “The truth is she sends money or leaves something when she comes, but also the truth is, it is not enough. Here we do not spend much, but there is always something else that you should buy for the child, and if the money is not enough, we will add to what we receive from our daughter and this money comes from this house” (Ana, 62 years old).

The grandparents’ guardianship of grandchildren is de facto rather than de jure, so grandparents did not legalise their responsibility. Nevertheless, they assumed responsibility for school and health matters and, in general terms, grandchildren recognise them as guardians and generally respect their instructions. Within the community, it was well known who were women migrants, so their parents’ guardianship of their children was understood and tacitly accepted.

Triadó et al (2006) argue that primary care-givers show greater psychological stress and experience lower levels of well-being and greater health problems than temporary care-givers. Yet the local health centre has not associated these symptoms with grandparents’ full-time caring for children of absent mothers and fathers. The older people interviewed felt that while they had lost leisure time because of their new responsibilities, such activities as going to school meetings or to the health centre were perceived as a kind of amusement giving them a reason to go to town. However, older women felt overburdened with all the domestic tasks, while older men were aware that the agricultural work was their responsibility and they scarcely received any support from their wives and grandchildren. Most of the men had lost their sons years ago through emigration. Only a few remained in the ejido to work with their fathers.

Older people want to share their local knowledge with their grandchildren, particularly in relation to seasonal fruit and vegetable picking, medicinal plants, animal production (turkeys, poultry and pigs), backyard vegetable farming, and detailed customs and traditions. However, almost without exception and regardless of age, girls, boys and teenagers have not shown any interest in this knowledge as they too expect to migrate. As a
result, grandparents feel the young generation devalue their knowledge:

“Sometimes they drive me crazy. No matter how much I want to teach them, they just don’t show up if they are pushed. There are things they help with but apart from those they just disappear when they are needed” (Joaquina, 55 years old).

The young people in the 14 sampled households talked about agricultural work as something that the older generation did. Most of them did not see themselves as ejidatarios or farming people. All of them are studying in governmental and private schools at different levels, but not even a handful are planning to study a technical subject related to agriculture. As older children, they delight in the idea of coming back to the rancho, the local term for a rural community, but they do not see themselves as living permanently in Rafael Valenzuela:

“When I was a kid I liked going into the fields but I do not want to go there any more. Sometimes my grandpa pushes me to help him on the plot and I do it. We, the young people, do not enjoy the field nor the agricultural tasks” (Rafael, 15 years old).

Traditionally, for rural household survival, backyard livestock production was an important social and economic strategy. In Rafael Valenzuela, backyard pig production (Figure 1) has served a number of purposes including home consumption and provision of a special dish served at parties or on special occasions such as graduations or for the Day of the Dead and Christmas festivities. It can also be carried out as a business, providing income for the family or for savings.

Figure 1. Young woman feeding pigs, in ejido.

Gutiérrez (2016) reports that until the 1990s, 85 percent of domestic groups were engaged in backyard pig production. However, unfortunately, in 1999 the ejido was devastated by floods that resulted in the loss of backyard animals, and in 2007 it was hit by two hurricanes. As a result of such disasters, backyard production fell drastically, decreasing to less than 10 percent of households maintaining this activity. The disappearance of pig production has had an impact on community life, reducing exchanges between neighbours and close family and friends who used to share useful information, meat, traditional local dishes, breeding boars and surplus.

In spite of this, there are older people interested in recovering backyard pig production, but they are not in a position to purchase supplies outside the community, and to work hard to maintain the pig units that need to be situated far from other houses due to their smell. Young people are not at all interested in getting involved and do not support the idea of recovering pig production. For most young women and men, the care of pigs is an activity they never liked to do and, in the view of older residents, they did not understand its importance. These are some of the reasons that the transfer of knowledge and skill from grandparents to children has not been successful, despite the apparent opportunity that grandparents’ guardianship seems to provide in this regard.

In conclusion, the migration of rural women leaving behind their daughters and sons is causing the reconfiguration of families as well as the gestation of different rural livelihoods.

References


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The rural women’s revolution? Two perspectives on gender equality and food security

Sharada Keats and Maria Stavropoulou

Abstract
This paper begins by reflecting on the ambition of international agreements made over the last three decades to address gender inequalities and change the status and position of women, through the integration of women into rural development policies and programmes. It concludes that while women are now mainstreamed in development programmes and policy, the outcomes for women are hardly supported by data and are, indeed, contested. It argues that while targeting women in agricultural development programmes to achieve gender equality and food security may work, changes linked with both demographic shifts and improvements in the rural environment may be more transformative for rural women and girls, while also improving the lives and livelihoods of rural populations more broadly. The paper continues by exploring connections between rural gender equality and food security using FAO’s food security framework that incorporates issues of food availability, access, utilisation, and cross-cutting these, stability.

Introduction
While the decade of the 1990s is considered to have featured gender significantly in mainstream rural policy (Ellis & Biggs, 2001), a whole range of activities designed to make women visible and raise their status began in the early 1970s (Okali & Keats, 2015). These were raised to another level by the time of the 1995 Fourth World Conference on Women held in Beijing, where the Beijing Declaration and Platform for Action established gender mainstreaming as a key strategy for addressing gender inequalities, with UN technical bodies being made responsible for its implementation. The Conference acknowledged the importance of a gender relations perspective, and concluded by calling for the integration of a gender perspective in all development planning (Chant, 2000). Five years later, the terms ‘gender equality’ and ‘women’s empowerment’ were prioritised as Millennium Development Goals, with the latter signalled as both a driver and an objective of development. As one of the 17 Sustainable Development Goals (SDG) adopted by the UN in 2015, gender is again mainstreamed, with Goal 5 aspiring “to achieve gender equality and empower all women and girls by 2030”.

The call to engage rural women in agricultural research and development programmes as a means of increasing food production and achieving food security has definitely been answered by governments at all levels and by development organisations of various sizes worldwide. Whether women and young girls have benefitted, and if they have, in what way, is contested. At the same time there is little information available on how this increased focus on women has impacted on boys, men and gender relations more broadly. We are aware that part of the difficulty of attribution reflects the complexity of the lives and livelihoods of rural households. Assessing the impact on boys and men on the other hand may be seen as unnecessary since they are not regarded as needy, or they are viewed as obvious beneficiaries. Meanwhile, assessing the impact on gender relations is hardly contemplated.

Regardless of the questions and concerns surrounding the modes of gender integration into development policy and programming, we argue that the changes that have occurred in the lives of women...
and girls in the developing world in the last quarter-century have been largely, but not entirely, in response to demographic shifts and that, in some cases, these changes have the potential to transform their lives for the better.

We begin this paper with these changes under the heading “A slow revolution for rural women?”, drawing largely on Demographic and Health Survey (DHS) data. We then move to examining the connection between gender equality and food security, firstly from an agricultural development perspective, and then from the perspective of changes in the enabling environment. We do this mainly using FAO’s food security framework (FAO, 2006). This framework moves beyond a narrow framing of food security as linked directly to food production for home consumption, to a broader framing that incorporates issues of food availability, access, utilisation, and stability.

A slow revolution for rural women?

Much has changed in the lives of rural women and girls in the developing world in the last quarter-century, in some cases with potential to transform them for the better. Notable changes include falling fertility rates; rising female household headship; increased participation of women in formal and informal work in agriculture and in the rural non-farm economy; rising access to key modern conveniences including sanitation, drinking water, electricity, mobile phones, and transport; women’s increased participation in education and training opportunities; better healthcare; and more political representation and participation.

Demographic changes

Current demographics in rural areas are characterised by declining population growth rates driven by both a fall in natural growth rates (births minus deaths) and a continued rural outmigration. With slowing population growth, the world is at the tail end of the second great demographic transition to be seen in modern history. Having started in the developing world after the Second World War, the transition is complete across much of East and Southeast Asia and Latin America. Yet in other developing regions, notably sub-Saharan Africa, it still has some way to run, with populations continuing to grow relatively quickly. For decades, those interested in agricultural and rural development have assumed rapid rural population growth, implying agricultural output will need to grow even faster, while pressure on natural resources mounts, and wages stagnate. This understanding is becoming out-dated as the demographic transition proceeds.

Perhaps the single greatest change for women’s lives over the past century is the drop in fertility. In low- and middle-income settings, a woman whose grandmother may have raised six or seven children, will now be one of three or four, and will herself bear one or two. Pathways and positive feedback loops between lower fertility and changes in women’s lives can be clustered into five broad groups, as shown in Figure 2.

Total Fertility Rates (TFRs) measure the average number of children a woman will have over her reproductive lifetime. In most developing regions, these have halved, or more than halved, between 1960 and 2014. Only in sub-Saharan Africa have rates fallen more slowly. TFRs are generally higher rurally than nationally, with around 1.5 more children born to rural as opposed to urban mothers. Where rural TFRs were above five in the early 1990s, falls have tended to be strong, though again, less in sub-Saharan Africa. Data on rural ‘wanted’ TFRs shows significant changes not only in the number of children, but also in achieving the desired number. With a few West African exceptions, DHS data show that rural women are having fewer children, and fewer unwanted children, indicative of advances in family planning. In many places where fertility rates have declined, rural dependency ratios (the portion of a population which is composed of dependents, ie people who are too young or too old to work) are also declining.

Trends and drivers of fertility decline suggest that where rural fertility rates remain well above replacement levels, falls are on the horizon. The forces driving fertility decline, whether child survival, economic development, female education, exposure to mass media, or public efforts to limit fertility, should continue to drive down rates. The exceptions will be where these forces have been interrupted by strife, natural disaster and economic decline. Sub-Saharan Africa, where fertility has fallen least and least consistently, may see slower declines. Limited decline in the region, however, may simply reflect less growth and development compared to other parts of the developing world (Keats & Wiggins, 2016).

When falls in rural fertility rates, combined with rural outmigration, begin to feed through to working age rural populations, there are implications for agricultural labour – tighter labour markets, with knock-on effects to farm wages: declining rural populations are strongly implicated in rural wage rises seen across developing Asian countries in recent years (Wiggins & Keats, 2014).

Women heading up households and the feminisation of agriculture

The rise in female household headship (FHH) is another notable shift for rural women, and presumably for rural men. As a statistic, ascribing headship to a man or woman fails to capture the extent to which household members cooperate and underplays kinship dynamics that are central to the lives of rural people. Its even wider significance, when viewed alongside other
changes beyond domestic groups, may be underplayed or missed altogether. Jackson (2014) points to a number of these changes, such as women featuring significantly as welfare recipients, guarantors of credit through their membership of women’s groups, greater political participation, and so on. In the agriculture literature, rising female household headship is cited as evidence of the feminisation of agriculture through, for instance, women managing family farms when men have migrated to seek work elsewhere (Box 1).

DHS data have captured the prevalence and growth of rural FHH for 29 countries, most in Africa, between the early 1990s and post 2010. Latest figures range from high levels of 50 percent, 42 percent, 37 percent, and 30 percent in Namibia, Zimbabwe, Kenya and Ghana respectively; to such low levels as 4 percent, 10 percent, 11.5 percent and 12 percent in Mali, Egypt, Pakistan, and Jordan, respectively. In all but six of the 29 countries, the proportion of FHH increased over the period, by an average of about seven percentage points. In several cases, the changes were marginal, but in others strong — above 10 percent in Namibia, Rwanda, Senegal, and the Dominican Republic.

The households in question are heterogeneous and may include married women with a husband elsewhere (eg having migrated for work), women who choose not to be (re)marrried, having the education or the social and financial standing to support this choice, separated or abandoned women, widows of war or AIDS, and single mothers who have not chosen to be so (Van de Walle, 2015). Although FHH may have a higher dependency ratio, their children are not necessarily worse off since these households may preferentially invest scarce resources in children. While female-headed households are often singled out in development discourse as disadvantaged compared to their male counterparts, this generalisation increasingly fails to hold.

What drives increases in female household headship in rural areas, especially in sub-Saharan Africa? It may be the case that fewer widows and their families are incorporated into extended family units following the death of a husband, or it may signal shifting power structures within family units or changes in socially acceptable living arrangements with more men migrating for work and not returning, women’s increasing access to education, and more women able to manage their own households as a consequence. However, analysis of changes reported in Van de Walle (2015) showed that an extra year of schooling led to a three percentage-point increase in the share of population living in FHH for sub-Saharan Africa, while a one-year increase in women’s age at first marriage led to a 2.5 percentage-point increase. Conflict and AIDS have also driven increases.

**Women and work**

Limited education and skills, low bargaining power, the disproportionate burden of domestic and care responsibilities, together with social norms restricting women’s mobility and action have all been indicated as major hurdles to women’s economic participation in both the formal and informal economic sectors. And yet where rural dependency ratios are falling, and rural services and utilities that reduce women’s burden are increasing, we might expect the capacity and time available for working-age rural women to participate in non-domestic work to rise. What they might do with this time largely remains a mystery but no doubt will depend on opportunities available. Meanwhile, there appears to be widespread agreement, based on evidence, that agriculture remains the most important source of female formal and informal work in the developing world, although statistics vary. Women also continue to be overrepresented in agriculture’s unpaid family labour pool. On the other hand, and possibly of more importance, is the evidence that women are increasingly participating in informal and own-account economic activities (ILO, 2016).

In recent decades women have increasingly engaged in the wider rural economy as labourers in large farms or in modern supply chains for agro-processing (Barrientos et al, 2003). Estimates suggest women comprise 30 percent of agricultural wagemakers globally, while forming the majority of those processing fresh fruits, vegetables, flowers, poultry and seafood (FAO et al, 2010). Nevertheless this work is often seasonal, part-time and poorly remunerated, lacking in social security benefits and training opportunities. Maertens & Swinnen (2009, page 14) provide a more optimistic view as follows: “modern supply chains can be more effective in assuring that the benefits from high-value production and trade are more equally shared among the rural poor and rural women when supply chains are based on agroindustrial production and hired labour rather than on smallholder contract-farming and family labor”.

What of trends in remuneration more broadly? Rural women, already less likely than men to hold wage employment, tend also to receive less pay for the same work — both on- and off-farm (FAO, 2011). A study of 14 countries in sub-Saharan Africa, Central, South and East Asia, Latin America and Eastern Europe, found

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**Box 1. Feminising agriculture in the developing world.**

Agriculture is said to be feminised or feminising if a) women form the majority of those employed in the sector; and b) if the share of women’s work in agriculture has increased significantly through time, regardless of whether women form the majority.

A recent survey of the evidence found agriculture to be feminising in many countries in the Near East and North Africa, Central Asia, South Asia, and Latin America. Table 1 lists examples.

In much of SSA, significant increases in women’s engagement in agriculture are lacking. This is not surprising however given that women’s participation has traditionally been high to begin with: for instance, 56% in Burundi, 67% in Lesotho, 59% in Malawi, 57% in Rwanda, and 62% in Sierra Leone.

**Table 1: Rising female involvement in agricultural employment**

<table>
<thead>
<tr>
<th>Country</th>
<th>Timeframe</th>
<th>% female involvement in agricultural employment</th>
</tr>
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<tbody>
<tr>
<td>Armenia</td>
<td>1999-2013</td>
<td>45</td>
</tr>
<tr>
<td>Botswana</td>
<td>1980-2010</td>
<td>47</td>
</tr>
<tr>
<td>Chile</td>
<td>1980-2010</td>
<td>9</td>
</tr>
<tr>
<td>Ecuador</td>
<td>1980-2010</td>
<td>14</td>
</tr>
<tr>
<td>Iran</td>
<td>1980-2010</td>
<td>25</td>
</tr>
<tr>
<td>Iraq</td>
<td>1980-2010</td>
<td>30</td>
</tr>
<tr>
<td>Morocco</td>
<td>1980-2010</td>
<td>30</td>
</tr>
<tr>
<td>Nepal</td>
<td>1980-2010</td>
<td>35</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1980-2010</td>
<td>12</td>
</tr>
<tr>
<td>Peru</td>
<td>1980-2010</td>
<td>19</td>
</tr>
<tr>
<td>Syria</td>
<td>1980-2010</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Data from Slavchevsk et al, 2016
Note: 1. 50 or 60, depending on source
that rural women were paid 25 percent less than men, with some three quarters of the disparity owing to systematic gender discrimination (Hertz et al., 2010). Nevertheless, although data for monitoring progress through time is sparse, a recent analysis of rural wage trends in Asia suggests gender wage gaps are slowly narrowing in some parts (Wiggins & Keats, 2014). While DHS have begun to record married women’s earnings relative to their husbands, only small changes of questionable significance are evident so far, with no overall trend in directions of change.

Conventional measures of employment fail to account for women’s unpaid domestic work that may still be considerable in spite of the changes identified. Time-use surveys consistently confirm rural women still shoulder the bulk of work involved in fetching water and firewood, processing and preparing food, washing, cleaning and childcare, all part of what is referred to as ‘reproductive work’. Children, particularly girls, are widely reported to assist their mothers in fulfilling these tasks.

Gender equality and food security: four pillars and two perspectives

The conventional FAO food security framework (FAO, 2006) consists of three core pillars – availability, access and utilisation; to which the fourth pillar of stability can be added across the dimensions, each contributing to a person’s nutritional status (Figure 3).

**Figure 3.** A food security framework: availability, access, utilisation and stability.

These four pillars frame the following discussion of the links between gender equality for rural women and girls, and food security, from two perspectives: firstly, agricultural development, and secondly, wider rural development.

Gender equality and food security: the agriculture lens

Pathways between gender equality and food security are well-trodden in the agriculture literature. Food availability, the first pillar, refers to the supply of sufficient quantities of food of appropriate quality. The bulk of thinking around gender here is concerned with women as food producers – either individually, or as part of families, cooperatives or other groups – though equally women are involved in food processing, preparation and consumption.

Studies highlight women’s ‘disadvantage’ vis-a-vis men in access to and control over productive resources including land and water, labour, capital, inputs such as fertilisers and services, including extension, finance, and Information and Communication Technologies (ICTs), as well as access to output markets (FAO, 2011). Overall, the literature tends to expose significant gender fault lines, while suggesting that agricultural approaches targeting women will efficiently advance food security objectives. The more optimistic estimates see the green revolution’s second coming, driven as much by women’s equality as by inputs – with women’s yields increased by 20 percent to 30 percent, pulling 100 to 150 million people out of hunger (ibid). Others argue the evidence does not match the boldness of such statements (Doss, 2017).

Access, the second pillar, is about being able to obtain or buy sufficient food. Though many farmers in developing countries produce food as well as cash crops, the majority are net-food purchasers. This facet then is largely about income. Sources of income for rural women include farm and non-farm jobs, as well as earnings of other family members, remittances, gifts, transfers and the like. Control over their own (or their family’s) earnings is also key. Studies often report links between women’s control of income and aspects related to food security such as child nutrition, education, and health (eg Smith et al., 2002).

Gendered aspects of stability feature most prominently in access considerations. Can food be obtained in a crisis when prices are rising or terms-of-trade are unfavourable? Here the agenda for women in agriculture is broadened to include their role as risk diversifiers, cash crop producers and consumption buffers; a common coping strategy in food insecure households being for women to feed children before themselves.

Finally, utilisation, where the major health aspects of food security are housed, probably has the least direct cross-over with agriculture. Here the main issue for women is time: given that women are primary carers, time-saving agricultural innovations ought to improve food security outcomes of their dependants. This may also link to women as income earners in as much as those who earn more may be better positioned within their own households to make decisions on health and care which impact nutritional status of household members.

The core agenda for gender equality and food security from an agricultural development perspective thus includes recognition of the need to ensure women’s inclusion in programmes to support their agency, as well as awareness of the gender implications of development actions. Hard quotas and measurable, attainable targets would also seem to be appropriate for monitoring and evaluating uptake.

Taking this deliberately narrow agriculture focus creates three sticking points. The first relates to the way in which women are instrumentalised within the agricultural and food security agenda. Evidence shows women can and do act as tools for development, at the same time facing disadvantages perpetuated by entrenched ideological positions of development agencies along with researchers and others. The extent to which women’s collective vulnerability or virtuosity can be assumed (and can be assumed to drive positive feedbacks) is not limitless. Estimates and analyses of growth and development dividends from removing barriers to women abound: the same cannot be said for studies of untapped male potential. While women as food producers are active in ‘feeding the world’, there is little discussion of the degree to which this is an empowering choice or a poverty-driven necessity. Gender must be considered in the context of overall declines in numbers of farmers, particularly where...
agriculture is feminising. Women, as men, need opportunities outside the sector, and not only in the poor quality, seasonal, or poorly remunerated jobs wherein women tend to concentrate.

The second point returns to the analysis of what are referred to as ‘gender gaps’. Although studies designed to assess the implications of these gaps generally conclude that household resources are inefficiently allocated between women and men, they may overlook key issues: the pitfalls of defining women’s disadvantage/gender gaps solely in relation to men, and especially spouses, regardless of what women value, and the fact that these allocations may be part of a wider set of exchanges from which women and other household members gain. At the same time, men’s access may fall far short of a gold standard in situations where smallholder farmers, regardless of gender, are poorly linked to services and markets for inputs and outputs, yet household food security may rely significantly on men’s fields. Finally agronomic factors, such as marginal soil quality and distance to plots, are also likely to feature in decision-making about resource allocations.

The third point, by way of introducing the next section, is the need to push beyond the narrow focus of agriculture. While the distinction is deliberately artificial, with much of the literature referring to some extent to the wider context, it is worth throwing the net wider.

**Gender equality and food security: the rural development lens**

Beyond production, **availability** is about getting food (and people) to markets. Key factors include such macro considerations as facilitating trade and markets, ensuring peace and stability allowing people to go about their business, and investing in rural infrastructure and transport services. For rural people, these advances can be life-changing; the difference between remote backwaters and thriving villages. With better roads and public transport, come easier means of accessing and stocking markets, schools or clinics. Although assets including bicycles or motorised transport are likely to be owned by men, women may also use them. In societies where women’s movements are more controlled, they may be able to travel in groups.

Distinctions between pillars in this food security framework can become blurred. Roads and transport services are also critical for **access**, since getting people and produce to markets is important for other reasons: women earning livelihoods trading in food or other goods for instance. Several studies exemplify this: in rural Bangladesh, better roads are reported to have led to a 51 percent increase in female labour supply and income (World Bank, 2011). Good roads also result in lower food prices for all, by cutting transport costs that can otherwise place a substantial wedge on prices.

The crux of the wider access agenda is building skills and acquiring time. Perhaps the most crucial gender issue is quality female education – beyond primary attendance, developing literacy and numeracy skills, finishing secondary school, or vocational and life skills training for older girls and women. Electricity and ICTs such as mobile phones can play a significant role in transforming household environs, potentially opening new avenues for income earning, personal development, reducing time spent processing and preparing food, and improving information access. Measures to reduce fertility also feature here, as do those supporting migration (with particular attention paid to women) and remitting.

Gender-aware social protection programmes, including school feeding, public works, transfer or subsidy schemes are also indicated, particularly those to improve **stability** and resilience in the face of crises (eg Jones et al, 2016). To these programmes might be added childcare services to free rural women’s time, and possibly to increase their earning potential, while enabling older siblings to enrol in school.

Aspects of **utilisation** not already discussed include water and sanitation along with healthcare and services. These lie at the core of the utilisation aspects of food security. Members of households with access to clean water and improved sanitation are far less likely to suffer infections that hamper utilisation. Where women and girls remain primarily responsible for domestic water provision, improved access to water is invaluable. Education or training to tackle poor hygiene and feeding practices also boosts utilisation. Finally, access, availability, and utilisation can be enhanced through appropriate legislative measures and their enforcement.

It is evident that the broad agenda around gender equality and food security goes beyond the familiar stomping grounds of female (food) farmers’ access to productive resources. A question for those interested in rural women’s empowerment then is the relative degree to which improvements in women’s status flow from different approaches – targeted provision of services to tackle agricultural disadvantages, or broad brush improvements in the wider enabling environment, ranging from boosting provision of rural public goods to promoting and enforcing appropriate legislation.

**Conclusions**

Few would argue that the changes shaping the rural developing world over the last three decades did not have any positive impact on the daily lives of rural women and girls. What is less clear is the causality of these changes. While lack of data make it difficult to definitively state whether changes have been truly transformative for women and girls, it is also the case that social change processes are complex, non-linear, often contradictory and slow, and therefore difficult to monitor.

Improvements in women’s lives, and rural lives in general, may be more related to demographic change than changes resulting from a focus on gender mainstreaming in international development policy. These demographic changes have led to change for women, but not exclusively – also for men, and for families of women and men and surrounding societies.

An important implication for future development policy is that while targeting women and girls may work for some purposes, changing the environment within which rural populations live will have greater impact on their lives. A more holistic view of, and discourse about, the role of rural women is needed to effect this, which implies moving beyond familiar notions about women as farmers to recognise their more varied roles,
activities and functions within rural livelihood systems. This may also permit a more detailed and disaggregated approach, recognising the different possibilities for, and choices made by, women in various rural situations.

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Opinions Page

Agriculture for nutrition? Not without gender!

Introduction

In South Asia, the majority of people are dependent on land and agriculture for their livelihood, yet producing your own food does not necessarily translate into better nutrition for your family.

In fact, malnutrition is widespread in the region with four in ten children chronically malnourished. The latest figures for 2016 suggest that 45 percent of children under five years are stunted in Pakistan, 38 percent in Bangladesh, and 38 percent in India (FAO, 2017). While most interventions aimed at improving nutrition target women, given their central role in caring for children, and in Bangladesh and India there have been considerable improvements over the past decade, the problem remains severe.

What seems lacking is a thorough analysis of gender relations, roles and expectations that may enable or limit the possibility for women, or indeed men, to make decisions and exercise their own choices in relation to food purchase and consumption. Without unpacking local, context-specific differences in allocation of resources and relationships within households, progress in tackling nutrition may be difficult.

Trade-offs between productive and reproductive work

A deeper understanding of both paid and subsistence work and
caring roles could help to reduce hunger and malnutrition when designing programme interventions. We need to consider the gender divisions of labour, in relation to both agricultural and domestic work (including care), and the degrees of flexibility that may or may not be possible. This is especially important for farming communities across seasons, as intensity of work and time inputs are likely to vary. Women’s time is a crucial factor for improving child nutrition, and in particular the regularity of feeding and care has significant implications for the nutrition and health of children under two years.

Emerging findings from the programme Leveraging Agriculture for Nutrition in South Asia (LANSa) in Pakistan indicate that the period of cotton harvesting, for instance, involves intensive work for women working small and marginal farms, as well as for landless labour households. While this contributes to improved incomes for the women, it severely affects their time available to care for children. In eastern India, during the paddy transplanting period, the time available for women’s domestic chores and care work declines by as much as 30 percent for small and marginal farmers and landless labouring households.

This issue of changing work patterns across seasons raises larger issues of women’s position and decision-making power, for example, in relation to the use of productive and reproductive labour within households. Families are not always nuclear units, hence bargaining and negotiations across different domains of work and life involve both men and women of different generations. A mother-in-law, daughter, or daughter-in-law may take over care functions rather than the husband. Understanding gender relations within families also involves understanding relationships across generations. By examining how work and care is negotiated within households, we can answer questions about how (or whether) agricultural work helps or hinders good nutritional outcomes.

Reference and related resource

Leveraging Agriculture for Nutrition in South Asia (LANSa), 2017. Women’s agricultural work and nutrition in South Asia: policy priorities. LANSa Policy Brief, 08, July 2017.

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Women as both agents of change and victims

Women are often at the centre of policy discourses around food for household consumption and child nutrition, and possible contradictions between these. In large part, it is women who are framed as mediating food and nutritional security at the household level: they are therefore both portrayed as ‘victims’, bearing the burden of ensuring household food security, and as ‘agents’, capable of improving both child and maternal nutritional outcomes. It is notable that men are often neither present or referenced in these discussions, though food production and provision for the family remains a central element of male identity in south Asian cultures. The outcomes on the ground of such a policy focus on women are unpredictable, and will need to be monitored if both men and women are needed to support food and nutritional security at the household level.

Gender needs to be at the core

Of course, all of this needs to be located within an analysis of ongoing changes in agriculture and, more broadly, development; this includes processes of commodification, increased land pressure, migration, price fluctuations, market competition, educational expansion and health provision, all of which contribute to shaping gender hierarchies and nutritional outcomes. However, without examining such topics through a gender lens, we would miss important parts of the story. These include the questions of whether women are restricted in allocating their labour to food production, how strict gendered allocations of tasks, roles and labour are, and how knowledge about food and nutrition is shared between different people.

Those of us working to make agriculture deliver for nutrition need to take note of gender. Taking a sensitive and ‘gendered’ approach will hopefully set in motion more equitable ways not only to transform gender relations, but also better serve our goal to reduce undernutrition.
Abstract

In agricultural research, gender has been recognised as a critical issue that needs to be addressed to enhance household food security. However, prioritising gender is often taken to signify a focus on women, with most attention given to women’s lack of access to land and resources. Consequently, the complex processes of how gender influences household food security are relatively poorly understood. In contrast, ethnographic evidence shows that both women’s and men’s strategies for household food security are highly gendered and that women’s, as well as men’s, approaches to coping with insecure lives are far more diverse than simply ensuring direct access to economic resources. With reference to this established evidence, we highlight how women and men negotiate for food security, and consider the implications for agricultural research.

Introduction

Agricultural research around gender and household food security has focussed on women’s empowerment as the key to enhancing household food security (Quisumbing et al., 1995; 2014). This framing revolves around two main lines of argument. Firstly, including women in improving agricultural production is argued to lead to efficiency gains, in part because women’s labour is seen as being underutilised, or inefficiently utilised, in agricultural production (Mehra & Rojas, 2008; Godfray et al., 2010), but also because women are perceived to be hard workers and reliable borrowers (Berger, 1989; Swain & Wallentin, 2009): so, including women generates efficiency gains which means that there is more food available. Secondly, it is argued that women’s inclusion in agriculture ensures that these production gains are more likely to be translated into household food security and particularly wellbeing gains for children, women and the elderly, because women are primarily responsible for household reproduction and their female altruism ensures that they prioritise the needs of the more vulnerable members of the household over their own (World Bank, 2011). Implicit in this thinking is an unspoken set of assumptions about men as lazy, unreliable, profligate and inclined to spend money on their own leisure activities, including drinking, at the expense of their family’s wellbeing (Whitehead, 1999; 2000).

This logic is not unique to food security discourse, and draws on pervasive ideas about the universal value of women’s empowerment to development (Cornwall, 2016). Arguments about this universal value have received sustained criticism both in terms of the empirical accuracy of their assumptions about masculinities and femininities, and in terms of their gender politics (Brickell & Chant, 2010; Chant & Brickell, 2013). Although framed as being about women’s empowerment, the logic of these arguments focusses on instrumentally deploying women’s reliability/labour/altruism for development without tackling underlying gender inequalities. Both these concerns about the universal value of women’s empowerment to development are salient when taking a more critical look at how gender matters for food security.
Within household food security, as in many other sectors, the universalised promotion of women’s empowerment has translated into a focus on women rather than on gender relations. The emphasis has been on promoting women’s economic autonomy from the household, and particularly their economic autonomy from their husbands within their marriages (FAO, 2014). This has been seen as unquestionably ‘a good thing’ in its own right, as well as being a way of increasing women’s bargaining power within the household, and concretised by promoting women’s independent ownership of agricultural and income-generating assets and resources, including their direct access to credit (Allendorf, 2007; Garikipati, 2008). As a result, household food security initiatives aiming at women’s empowerment tend to target women for training and extension inputs, to focus on introducing innovations and improvements for women’s crops, income-generating activities, processing and marketing (e.g. Bushamuka et al., 2005). Common elements of such programmes involve working through women-only farmer groups and elements of gender sensitisation. It has however proven much more difficult than anticipated to achieve the desired outcomes of these efforts either in terms of food security gains or women’s empowerment gains (Doss, 2017). Underlying these disappointing returns from the push to put women’s empowerment at the forefront of food security efforts, are misunderstandings about how gender matters for food security.

The assumption of a narrow and universal link between economic activities and women’s empowerment is rooted in poor theoretical understandings of the diverse context-specific gender relations within and beyond the family (Syed, 2010). There is a substantial ethnographic literature on gender that evidences this diversity and questions the principal assumptions that underpin the simplistic view that women’s empowerment is key to enhancing household food security. Below, we draw very selectively on this and our own published work to highlight a more nuanced understanding of how gender matters for household food security.

**Ethnographic insights into how gender matters for food security**

Ethnographic studies, many of which are not specifically concerned with food security, have long shown the complexity and ambiguity of gender relations in everyday lives. Women who are economically successful are often deeply and deliberately embedded in interdependent patriarchal relations with men and other women, as these bring them advantages (Overà, 1993), indicating that men’s power matters to their wives, as well as more generally to their female kin. Ethnographic research in sub-Saharan Africa shows that women’s and men’s strategies for food security extend far beyond the husband-wife dyad, and are embedded in ties that they foster with men and other women within the community beyond the household, over the life-course, as a means of ensuring material resources and thereby both short-time and long-term food security (Kawarazuka, 2015; Rutakumwa et al., 2017). Women’s food security is thus supported by different men and women over the life-course.

The value of interdependence is well evidenced by the food insecurity experienced by some women at particular life-course moments when they find themselves too weakly embedded in the patriarchal relations of households and communities: these might include soon-to-be-married-off young women, abandoned wives and widows who are too isolated to draw effectively on others for support or food security (Cleaver, 2005). It is also revealed when women who are given title over land, or exclusive access to credit, either hand this over directly to men or allow men to implicitly control these assets, despite retaining formal ownership (Van de Walle, 2013; Myrttinen et al., 2015). This situation is often (mis)read as demonstrating the irresistible dominance of men’s power, but in-depth empirical evidence suggests that it is, through women’s strategic agency, intended to shore up both men’s support as well as men’s respect and affection for them (Garikipati, 2008; Doss et al., 2014).

Indeed, women often have much more control over men’s land than is usually recognised (Moore, 1994), and they invest in securing and developing that power over their life-course. The control that women have over men’s assets and resources is often misrecognised because it is ‘hidden’ under a performance of normative gender roles and values that often prove to be at odds with actual behaviours and ‘behind-the-scenes’ negotiations (Locke & Okali, 1999). Indeed, ethnographic research has illuminated the value to women of gendered roles and responsibilities through which they creatively negotiate for better options, and long-term and lasting outcomes (Rosbon, 2006; Hanrahan, 2015; Kawarazuka, 2015; Stark, 2011). These roles are not only of strategic value, but also of intrinsic value to women, and at the heart of the desire for food security: women do not strategise around what researchers call ‘food security’, but rather are orientated to building secure and meaningful lives for themselves and those they love.

Women can be very adept at drawing on traditional gender roles in order to enhance their bargaining power and this can be done in ways that subtly change the power relations in their home. Economic autonomy is thus not the only route for women to ensure food security (Richards, 1961), being both extremely risky and often unattractive to women themselves. Women’s agency, their practical interests in ensuring food security, and their affective interests in safeguarding their family’s wellbeing, are much more strongly orientated toward negotiating within the existing gender norms rather than challenging them.

Finally, it is not only women whose lives and food security are interdependently entwined with patriarchal relations. Whilst it is taken for granted that men invest in and gain from patriarchal relations, there is almost no recognition of how men at different points in their life-course are also constrained by and dependent upon prevailing gender relations and how this matters for their food security. The stereotypes of male characteristics on which the universal promotion of women’s empowerment is based are rarely based in rigorous evidence, and, contrary to these caricatures, ethnographic research has often shown that men often work...
hard, save up, reliably invest earnings in their family, love and listen to their wives and children, and, at times, can find themselves isolated or on the wrong side of dominating older brothers, overbearing fathers and unscrupulous lenders. Jackson (2013) shows how central insecurity in marriage is for men in southeast Uganda and notes that managing manliness successfully is a difficult and complex undertaking (2000). She emphasises the need to look again at men’s provider roles and highlights that: some kinds of male work, like female work, are vulnerable to invisibilities and exclusions; some men, like some women, suffer displacements in and disengagements from households; and that there are possibilities for male altruism. Whilst gender norms often suggest that men can make unilateral decisions about taking on new kinds of productive activities, evidence from Cambodia, the Philippines and the Solomon Islands shows that men generally have to, and want to, invest in negotiating for their wife’s support because it is important for the success of new ventures (Locke et al, 2017).

Taken together, ethnographic insights into how gender matters for food security argue for: the value of a relational understanding context-specific); and the context-specificity of how gender matters for food security (rather than a universalised understanding).

So what does this mean for taking gender into account in food security research?

Ethnographic insights into gender relations do not support the universal emphasis on women’s empowerment in food security research and policy, but nor do they provide a neat alternative to this ‘magic bullet’. Taken together the ethnographic evidence does suggest that a more nuanced understanding of gender and food security is needed to underpin policy research. This is not a new call (Jackson, 2007) but it is one that to date has been largely ignored by mainstream agricultural and food security research, despite remaining highly pertinent. The inability to provide an off-the-peg alternative undoubtedly makes it difficult to take these insights on board. Therefore, we conclude by identifying what we believe are three starting points in thinking about how to move forwards on this.

Firstly, we believe that there is a need to develop more sophisticated theorisations of how gender matters for food security and to build the capacity of food security researchers and practitioners to engage with these more complex ways of thinking about gender and food security in their ongoing work. This work is ongoing in different places and different institutions, usually in collaborations between feminists and food security researchers and practitioners: the challenge is to institutionalise this work so that what is currently the ‘cutting edge’ becomes institutionalised practice.

Secondly, we believe that understanding context-specific gender relations and women’s creative agency will make a difference in identifying development approaches that facilitate women’s access to resources, and thereby improved food security in particular times and places. Clarity is needed over what can and what cannot be usefully generalised. We can build more sophisticated theoretical understandings of gender and food security that are generalisable. Whilst we cannot aim for empirical understandings of gender and food security that posit universally valid relationships, we can build up particular analyses of gender and food security that are likely to have relevance for similar contexts. Importantly, understanding different women’s and men’s approaches to building secure lives in specific contexts offers a better starting point for agricultural research aiming to impact on food security than existing universalised assumptions.

Thirdly, we believe that food security thinking about gender needs to take a step back to rethink what women’s empowerment looks like and who determines this. The automatic privileging of the promotion of autonomous economic activities, resources and assets for women is not a good starting point: rather strategic programme choices need not only to be informed by context-specific analyses of gender and food security, but also to be made in consultation with both women and men who are food insecure.

To conclude, improving household food security is not as simple (or as difficult) as shifting land and asset ownership from men to women. Women’s and men’s agency and interests are orientated toward negotiating within the patriarchal resource distribution processes. These negotiations often entail subtle shifts in power that are aligned with women’s and men’s interests in developing secure lives and wellbeing for them and their loved ones over the long-term as well as the short-term. Changing the way we think about how gender matters in household food security will enable us to think more creatively about working with these ongoing negotiations in our efforts to enhance household food security.

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News from the Field

From gender mainstreaming and empowering women in agriculture to gender transformation

The International Fund for Agricultural Development (IFAD) has over 25 years of experience of mainstreaming gender in its development programmes, and has played a key role in the global arena. Its focus on women as a primary target group dates back to its early years. Its priority focus on women’s economic empowerment to-day is seen as a necessary, although not sufficient, condition for changing women’s status and position in society – which it sees as essential for achieving gender equality.

Learning from its experience that activities aimed only at women were not effective, IFAD established its 2003-2006 Plan of Action for Mainstreaming a Gender Perspective. This was followed in 2012 by its Policy on Gender Equality and Women’s Empowerment, which builds on three pillars: women’s economic empowerment; reducing women’s burden of work inside households and in fields; and increasing women’s voice and influence. Based on the understanding that when these dimensions are addressed, conditions are created for gender transformation, IFAD addresses and mainstreams the above pillars in its operations to-day using various toolkits to assist in the design of projects on Poverty Targeting; Gender Equality and Empowerment; Reducing Rural Women’s Domestic Workload through Labour-Saving Technologies and Practices; and Household Methodologies for achieving Gender Equality and Social Inclusion (Box1) (https://www.ifad.org/topic/overview/tags/gender; https://www.ifad.org/topic/overview/tags/knowledge_notes).

Box 1. Household methodologies for results and impact.

IFAD has increasingly sought to transform inequitable gender relations and discriminatory norms at different levels. Most recently this has involved applying and refining household methodologies which are being implemented across various regions by governments, development agencies and NGOs. The experiences of IFAD-supported programmes in Malawi, Sierra Leone and Uganda, and an IFAD grant-supported project led by Oxfam Nord in Uganda, Rwanda and Nigeria, demonstrate that these methodologies can contribute significantly to development objectives, including gender equality. In these highly participatory activities, household members identify their aspirations and the obstacles to achieving them. They then work closely together to take responsibility for the changes they want to make and to improve gender relations within the household. Women and men who take part have reported greater resilience to local shocks; more daughters and sons in school, including at tertiary level; increased productivity and incomes; and improved food and nutrition security. IFAD has also successfully strengthened women’s leadership at all levels – from the farm to farmers’ associations to global farmers’ forums. To date, 50,000 women and men in Malawi, Nigeria, Rwanda, Sierra Leone and Uganda have participated in these activities that are now incorporated into the design of new projects in Ghana, Lao People’s Democratic Republic and Mozambique.

Box 2. Women’s groups participate in provincial and district development councils in Peru.

The Market Strengthening and Livelihood Diversification in the Southern Highlands Project (Sierra Sur) worked with poor Quechua and Aymara families in the southern highlands of Peru to strengthen their organisations, focussing on women farmers and rural women without access to financial services. The project addressed women’s limited voice in grassroots organisations by involving women’s groups in provincial and district development councils and mesas de concertación (round tables) at the local level. Women increased their participation thanks to their enhanced leadership capacities, their increased knowledge and greater confidence in speaking in public.

Strengthened community-based organisations provided 9,141 women with access to financial services by opening savings accounts; 3,382 women obtained microcredit, and 6,526 obtained life and accident insurance.

The majority of IFAD-supported projects have made solid progress towards mainstreaming a gender perspective. However, a few have gone beyond this to address the root causes of gender inequalities, including addressing prevailing social norms and attitudes that constrain women’s ability to act in their own interest, and more broadly to confront discriminatory social systems. This approach is designed to ensure equal access for women to productive assets and services, and to employment and market opportunities. However, IFAD is well aware that gender transformation goes beyond individual economic self-improvement of women to changing the power dynamics and structures that reinforce gendered inequalities in society. Such changes are envisioned in IFAD’s Agenda 2030 to achieve sustainable development and to ensure that women and girls have freedom from violence, access to knowledge and health, and voice, leadership and participation (Box 2).

Achieving fundamental change is not easy and will require addressing various factors simultaneously, including: institutional partnerships, system-wide multi-actor collaboration within strategic alliances supporting the role of gender champions/change agents, and including men.

IFAD plans to increase the number of projects that focus on transforming gender relations and the distribution of power between women and men. The wider aim will be to produce gender transformative agricultural policy to support these changes.

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West African market women negotiating productive and reproductive roles through time

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Abstract

Contemporary agricultural policy in West Africa encourages commercialisation of agriculture. West African women, noted for their prominence in agricultural marketing, have responded throughout history to such changes. This article examines how they have done this through three case studies: of Igbo farmer-marketers, Fulani milk traders, and secluded Hausa food sellers. The case studies demonstrate that women’s productive marketing activity helps them fulfill, and is assisted by, their reproductive responsibilities, which are defined in relation to their households. It concludes that women’s ability to manipulate and control their own reproductive and productive labour, and that of children, is critical to their maintenance of a market niche. Introductions of technology, and of varying ideas about the role of women in farms and markets, have also influenced the market positions they have held at various moments in time. The way in which women continue to negotiate labour relations will shape the way contemporary introductions of technology and gender ideology influence their enduring market position.

Introduction

Agricultural trade has been an enduring element of West African women’s economic activity, across diverse contexts within the sub-region (Coquery-Vidrovitch, 1998) and through several periods of change. This paper explores the labour relations that have enabled it to persist. Like agricultural production, women’s trading activity is linked to their reproductive household roles, and the way it expresses is related to how their reproductive and productive labour, as well as that of men and children, is managed (Jackson, 1978). Successive changes in the nature of commercialisation have shaped these interlinked labour relations and this paper reflects on the implications of such changes for the future.

Multiple forms of West African women’s trading have persisted and developed by taking advantage of historical shifts in the nature of commercialisation. Several studies have shown how colonialism, through its impacts on trade, has influenced women’s roles (Akyeampong & Fofack, 2014). The adaptability demonstrated in such examples confirms that the interlinkage of women’s productive and reproductive roles contributes to the resilience of trade as a livelihood strategy. This is the case across the lifespan of a trader, as well as across settings that vary in terms of religion, climate and dominant ethnicity, and comprise different systems of crop and animal maintenance, as well as mobility. Thus, there is variation across space as well as time.

The contemporary policy emphasis on smallholder commercialisation has encouraged increased focus on access to formal capital within advocacy and development activity. This has sometimes been linked to a perceived need for women to gain formal ownership of land as collateral (Toulmin, 2009). This paper acknowledges these policy trends, but focusses primarily on how women have historically organised their own labour and that of others to persist as traders through times of change.

These themes are investigated through three diverse case studies, chosen in order to demonstrate that commonalities exist across different contexts. The paper concludes that women have always aimed to maintain flexible networks of relations, in order to be able to manage changes in labour availability and agricultural markets, including injections of capital into them. They do this by controlling and altering relations between productive and reproductive labour allocations. The article is summarised by briefly reflecting on what this implies for contemporary traders, bearing in mind the current policy emphasis on access to capital and incorporation into formal value chains.

Igbo’s palm oil and cassava trade

Igbo women have traditionally provided food for their families. Only yam, ‘king’ of crops, was perceived as a ‘men’s crop’ (Korieh, 2007), while women organised consumption of other foods, including grains, legumes and vegetables. This meant that, despite not necessarily owning land, they dominated farm...
labour (Ezeigbo, 1990), yet also traded in these goods.

One element of this was the ‘silent trade’. Into the 20th century, female farmers placed goods they had for sale by the roadside, enabling passers-by to purchase them, as they continued their work on the farm. This was enabled by the use of currency, in use in Igboland before the arrival of European colonists, as opposed to barter. It also relied on spiritual assistance: a number of cowries, protected from thieves by a fetish, were placed next to the goods to show how much customers needed to pay for them (Müller, 1985). This form of trade was therefore entirely connected to farming, and both were integral to women’s household management and feeding responsibilities.

Trade also happened at the village scale. Igbo village markets were governed by councils of elder women (Ezeigbo, 1990) who controlled who could enter the market and the prices of certain goods. In a way they acted as cartels, protecting the interests of village women traders, but also having the power to admit other traders, male and female, from outside the village. These village markets were frequented by women from surrounding villages, but also by longer-distance traders. In particular, men from the Aro ethnic group, connected to the Aro oracle, were associated with middle-distance trade (Müller, 1985). Women, as farmers, were well-placed to be primary participants in these local markets, selling farm goods as well as processed products such as soap and oil. Through village markets, women and men gained access to goods from further afield such as fish, ironware and specialist clothes and, later, imports brought by European colonists and traders. Women were able to travel to inter-village markets if they had relatives who could protect them on route – risks, including war, prevented women’s unaccompanied long-distance travel (Müller, 1985), as did their roles as household managers, carers for children, and farmers. Nevertheless, some, possibly older women, became middle-distance traders, moving goods between markets within a village group. So, this portion of women’s trade also was integrally connected to farming, and linked women’s local trade of farm produce to longer-distance trade, more dominated by men, who could travel with less restriction.

As the slave trade deepened towards the end of the 16th century, food, especially yam and palm oil, was needed to feed slaves embarking on the transatlantic journey. The demand for palm oil worked its way through the market system, and did not cease after the official abolition of slavery. This may have happened either through direct links from yam traders to village oil palm producers, or through more diffuse mechanisms whereby female palm oil producers noticed increased demand in village markets (Müller, 1985). Whatever the case, female palm oil producers and processors increased production, and sold oil to the agents of European merchants, initially through village markets. Some women also began trading yam to those same merchants.

By the 1920s, agents of British merchants were attempting to evade village markets by encouraging men to start producing palm oil and selling it directly to them (Müller, 1985). This involved distribution of processing machinery to those men (Chuku, 1995). It has been speculated that the British targeted men in this endeavour because they assumed that European ideals of agricultural and industrial gender balance should pertain in West Africa (Chuku, 1995). British practices also influenced the gender balance of import traders – the British advanced goods to traders on credit, but demanded collateral, which could take the form of land (Müller, 1985). Women, who did not necessarily formally own land, were thus less able to participate in this trade.

Village markets persisted for the less lucrative local trade. As associates of British merchants were now buying directly from farmers, some long-distance traders suffered a decrease in business. For the Aro, this coincided with a decline in the sway of their oracle, due to the introduction of Christianity (Müller, 1985).

Through these mechanisms, penetration of internationally-linked, credited trade, associated with changes in technology and religion, changed trading patterns. The connection between local, female, producer-processor traders and longer-distance male and female middle-men was replaced, in part, with a more lucrative affair where male agents of long-distance colonial merchants dealt directly with male farmers.

Yet the colonial influence on commercial trade also provided opportunities for women. The colonists introduced cassava as a food that was less labour intensive than yam, easier to grow on less fertile soils and easier to process and store. This was advantageous for local food provision as well as transportation on slave ships. Early cassava varieties were high in prussic acid, possibly one of the factors leading to its low status, and therefore the ability of women to capture cassava production as well as processing and sale (Korieh, 2007). Women had also been minimally involved in yam cultivation, so were not seen to be avoiding labouring in yam fields by beginning to work with cassava.

This case study shows that women’s reproductive role concentrates their productive labour and trading activity, yet also constrains it, as they are mostly required to stay local to their houses and farms. The influence of new technology is guided by its association with credit and capital. When its introduction is combined with ideas of trade as a male domain, women may be marginalised in certain sectors of trade.

Fulani’s dairy trade

Fulani women traditionally trade dairy products, usually including fermented milk, butter, and raw milk mixed with millet, though this varies between groups. As with most agricultural goods, milk can be consumed as well as sold, implying a choice between reproductive and productive functions (Majekodunmi, 2017).

The influence of Islam is seen in Fulani society with the dominant idea that a man should ideally provide staples, including grain in those Fulani households where this replaces milk as a core meal (Waters-Bayer, 1985). Thus, the money a woman obtains from milk sales can be used for personal items such as toiletries, jewellery, extra clothing and gifts to friends, as well as condiments. The extent to which a woman can dedicate her milk proceeds to these functions can depend on the male head of household’s actual ability to provide food, and her subsequent need to purchase food to feed herself and her children. Fulani people were not traditionally farmers, although many do now cultivate, and were sometimes associated with trade rather than farming, maybe because they sometimes sold cattle (Majekodunmi, 2017). Thus,
food is not necessarily obtained from farming, but may be purchased using the proceeds from trade. Herding is governed by seasonal variations, so milk production varies, influencing its inclusion into diets as well as the market at various times of year. Women may also have sources of income other than milk, such as trade of petty goods and small ruminants (Majekodunmi, 2017), and these sources of money may be used for any household expenses the women incur, whilst the milk money is retained for personal expenses (Waters-Bayer, 1985).

However, the concept of the household is especially loosely defined for people who are, to an extent, nomadic or practise transhumance (Buhl & Homewood, 2000). Households are constantly reshaping and reforming, especially with transhumance, fairly high divorce and fertility rates, and polygyny. Therefore, the balance of responsibility in the household between various male and female members changes as they move through time and space.

In different groups, men, women or children may milk the cows. When an adult does this, they have more control over how much is abstracted and its destination (Waters-Bayer, 1985). Milk is needed not only for human sale or consumption but also for calves to develop, so a balance must be struck between providing milk for trade and food, and maintaining the future viability of the herd. Yet this is not a binary distinction between women’s and men’s interests, because the herd can include cattle that belong to women and youths as well as men, and the proceeds from milk or meat can be returned to certain functions that benefit multiple members of the group (Buhl & Homewood, 2000). Nor are there particular reports of women being asked to sell only the milk that comes from their own cows. Women also rely on the labour of children, not only to help milk the animals, but also to hawk the milk, which is how trading skills are passed between generations. So, women are rather more autonomous than could be surmised from a model of the household as a consumption and production unit. Yet, simultaneously, they are linked to a herd generally managed by the household head.

West African dairy commercialisation has been proposed at several points in history, though less prominently in the current modernisation trend, and on a smaller scale than the East African Dairy Development project led by the NGO Heifer International. Schemes of various scales have been differentially successful – Malilait and Koubri enterprises, from Mali and Burkina Faso respectively, for example, have taken off, unlike the Beninese Société Coopérative Laitière de Gogounou (SOCOLAIG) (Djoby, 2015). There has been little research on the implications of this for Fulani women. It is very relevant to speculate on how processing technology, fixed pricing and central collection points, for example, would interact with Fulani women’s historically and culturally specific modes of organising dairy production. The extent to which they participate in, reject, ignore or modify entrant dairy schemes has implications for the organisation of their labour supply and income streams. It thereby influences their relations with other people within and outside their dynamic households. One possibility could be to imagine a scenario such as that which arose in the Igbo palm oil trade, where mechanisation and commercialisation led to some level of segregation between male-dominated international trade and women’s local trade.

This case study shows the importance of fluidity and flexibility in women’s agricultural trading activities. The allocation of labour and of milk, and the proceeds of its sales, to productive and reproductive functions varies according to context and situation, as does the position of women in relation to a herd or household.

Secluded Hausa’s ‘hidden trade’

Secluded Hausa women of northern Nigeria may seem rather different from the highly mobile Fulani. Yet, there are similarities in terms of household roles, in part due to similar Islamic influences, which have dominated urban parts of Nigerian Hausa land since the 19th century jihad of the Fulani Usman dan Fodio (Barkow, 1972).

Married women remain in their compound during the day, ask their husband’s permission to leave the house in the evening, and must be accompanied on such trips, for example by children. This precludes agricultural and market activity (Callaway, 1984). Historical sources have described slave women’s involvement in farming, alongside non-slave women from farming households (Barkow, 1972). Following slavery’s abolition, many women took the opportunity to enter seclusion both as a marker of new-found status (Chumley, 1998) and also, presumably, to ensure that they were not obliged to return to hard labour.

The form seclusion takes depends on several factors, including urbanisation: some more rural women converted much later to Islam. The influence of class and wealth is complex. Earlier on, higher class women could afford to mark their prestige through seclusion if their husband was wealthy (Kudoadzi, 2014). Callaway (1984) speculates that higher class women may also be more likely to pursue education, possibly encouraging a more liberal interpretation of Islam that permits them to work outside the home.

Unmarried, and therefore unsecluded, women are more conspicuously involved in economic and agricultural activity. This includes widows and post-menopausal women, especially divorcees who are not expected to remarry: divorce is fairly common (Callaway, 1984). There is also evidence that women in more rural places, less frequented by researchers, may be more involved in activities that give them access to agricultural goods, primarily harvesting, threshing, winnowing and portering of harvest (Chumley, 1998). Women also play central roles in markets as the Sarkin Auro or Saraki (Chief Grain Measurer), or chief of the ma’anteyas (grain sellers) (Rufa’I, 2016).

Yet secluded women also trade agricultural goods in what has been called the ‘hidden trade’ (Hill, 1969). Alongside providing services like hair braiding and sewing, they prepare, process and sell food items from their compounds, relying on children to obtain raw materials, hawk goods and carry them to customers (Callaway, 1984). The way in which food items feature in this trade varies between locations. Vereecke (1993) reported that in Yola, the Fulani, who defined cooked food selling as shameful within their moral code of Pulaaku, dominated the population, so food comprised a lower
proportion of Hausa sellers’ wares too. When food does play a role, cooked food in particular is important, as is grain for the evening meal.

The formal division of Hausa household responsibilities is similar to that of the Islamic Fulani, with men responsible for household staple food provision. Some academics thus consider that secluded Hausa women are released from the reproductive responsibilities Igbo women toil for, and describe how the primary function of the hidden trade is for women to obtain a personal source of income that can be used for two main purposes (Kudoazdi, 2014). The first is to purchase personal items similar to those listed above for Fulani women. The second is to accumulate savings which act as a safeguard in the event of widowhood or divorce, and are used to pay the bride-prices and trousseaus of sons and daughters (Schldkrout, 1982).

However, through their trading activities, women still play a central role in the provision of household food. Not all men farm, and farm produce rarely lasts all year. So men, probably via a child, may buy their household grain from a trading woman, for one of their wives to cook. That trading woman herself may have sent a child to buy grain in bulk from a wholesale market. A man’s economic strength influences whether he is in fact able to buy household grain, and therefore the extent to which his own wife actually steps in to provide it, or a substitute (Schldkrout, 1982). She may be obliged to use profits from her own business to purchase such household staples. The same relates to purchase of condiments. There are also numerous situations of de facto female household headship, where widowed or divorced women, who are too old to remarry, and for various reasons have not returned to their natal homes, provide grain for their own households (Pittin, 1991).

Purchased cooked foods and snacks such as millet balls and fried bean cakes may substitute for home-cooked food, especially in urban areas and at breakfast or lunch (Barkow, 1972). In this way one woman profits from another woman’s husband’s inability to provide food, and maybe even a lack of labour to cook, if that other woman is too busy pursuing her own income-generating activities. This replaces women’s reproductive with productive labour in performing reproductive duties. Through these transactions, secluded women interact, albeit through men and especially children, with the non-secluded ma’auniyas and female farmers who trade agricultural produce at the farm gate and market. Thus, the hidden trade provides women with a market for the fruits of their productive labour, and contributes subtly to the engagement of non-secluded and secluded women in agricultural trade and household food provision.

Pittin (1991) suggests that seclusion fits with the contemporary Nigerian state’s notions of Islamic women’s identity, as it did with the colonial state’s ideology of women as homemakers, employed by the British in the Igbo palm trade (Kudoazdi, 2014). So there is institutional backing for this system where space is divided into a public, male arena, and a private, female domain (Chumley, 1998). Within that domain, women have hitherto largely concealed how they organise their own labour and, critically, that of their children. Thus, they maintain some financial autonomy whilst satisfying domestic responsibilities, in a context where traditional and Islamic norms meet. Chumley (1998) claimed that this trading activity is a way that women separate their personal profit from household needs in a way specific to post-colonialist capitalist imperative, drawing on Porter’s (1989) observations that the groundnut trade in part facilitated the hidden trade.

Changes in context, including in agricultural development policy, will certainly influence the hidden trade. Considering the connections between secluded and non-secluded women’s trade, commercialisation of trade at the farm gate is likely to have some effect. Ambitions of the state towards child education and stopping street hawking (Pittin, 1991), mean that the labour relations of this form of trade may need to be reconfigured if it is to persist. Schldkrout (2002) has described how children’s labour is critical in the economy of Kano, and argued that they should be seen as entrepreneurs in their own right rather than merely helpers of their parents. Another important point is that girls are also future women, and will likely use learnt entrepreneurial skills and memories of their childhood activities to manage their own daughters’ labour once married.

This case study reconfirms that West African women’s trade is intimately tied to food production and provision, and to their relation to men and especially to children. Access to space and labour interacts with religion and tradition to shape the role of women as agents in the food system in place-specific ways.

All three of the case studies have echoed this idea that women’s productive role is shaped by their relations with children and men. The way they negotiate the link between reproductive and productive labour is shaped by their movement through space, connection to ideas about how women should be involved in markets, and engagement with technology.

Conclusions

Women’s marketing of produce is an integral part of the West African agricultural system, across diverse situations of ethnicity, mobility, agropastoral system and religion, through space and time.

These case studies have shown how women manage reproductive and productive labour to connect their marketing activities to their reproductive roles. Through this, they maintain their position in their immediate household, but also retain links to others outside it. Women rarely stay in the same household all their lives, especially where divorce rates are comparatively high, as in the last two case studies (Buhl & Homewood, 2000). Those who do produce crops or keep livestock may gain access to productive resources through men (Nchansi & Bellwood-Howard, 2016), but also through other mechanisms such as gifts, community provision or markets. So, it is important to maintain a wider trade network outside whatever household they are in at a particular time. It is therefore critical for women to define their roles and responsibilities in relation to men, but more particularly to children and other women of different ages and situations (Okali, 2011). Through changes in the nature of commercial activity, colonialism and religion, they have redefined their relations to others to find ways to maintain and modify their agricultural and trading activities. These case studies have
shown that West African women’s agricultural trade has been a resilient contributor to livelihoods through such periods of change, at least in part due to the way that women have been able to manipulate their labour relations.

The contemporary agricultural development scene involves a policy drive towards commercialisation in West Africa, involving introductions of technology and changes in the organisation of credit. Governments and non-governmental organisations such as the Alliance for a Green Revolution in Africa and Heifer International are united in this push for commercialisation of agriculture, and it seems very likely that programmes promoted therein become more pervasive in West Africa. The implications of such changes are tied to how people organise their relations with those around them, and how their gender intersects with various other facets of their identity such as class and religion. Some trading women will be able to take advantage of formalisation plans. Simultaneously, poorer people may be obliged to continue existing trade patterns, which may be harder to continue if discouraged by policy. Others still may find innovative new niches not planned by policy. Women’s ability to effect these different strategies depends in part on how far they are able to control labour and negotiate capital, and this also influences the impact that policy will have.

Another interesting element to watch relates to land. Women’s ability to trade and produce has not historically depended on formal title to land (Nchani & Bellwood-Howard, 2016). Yet, land titles are still promoted as appropriate collateral for credit. This has clear implications for female farmers, and it is relevant to observe whether it also influences traders.

References


Gender in Agriculture: closing the knowledge gap
Quisumbing AR, Meinzen-Dick R, Raney TL, Croppenstedt A, Behrman JA, Peterman A (Eds), 2014
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This volume usefully brings together, and to some extent updates, the reviews commissioned by FAO for the preparation of the State of Food and Agriculture 2010-11 report: Women in Agriculture: closing the gender gap in development (FAO, 2011; available as free download from fao.org/docrep/013/i2050e/i2050e.pdf).

For anyone wanting to understand more fully the analysis and thinking that lie behind that report, this will be a helpful resource. However, its price alone suggests it is aimed at an academic audience with access to physical or electronic libraries, a view supported by its claim to fill “a niche in literature for a standard reference for the analysis of gender issues in agriculture”. With much of the analysis done five years before publication in 2014, there is inevitably an out-of-date feel to some of the text; nonetheless its thematic coverage and its setting of recent developments in thinking in an historical context of how an understanding of gender in agriculture has matured over the past 40 years, make it a useful point of reference. Its specific focus on agriculture makes it a good partner to the World Bank’s World Development Report 2012: gender equality and development; while the depth of its conceptual analysis sets it apart from the practitioner-focused Gender in agriculture sourcebook, published in 2009 by the World Bank and IFAD (both available as free downloads).

The opening chapter restates the ‘equity and efficiency’ rationale for a policy focus on gender; for interventions that will give men and women fair access to agricultural resources and markets which in turn will enhance productivity, output and food security. It argues that while UN bodies individually and collectively have been addressing gender issues since the 1980s, the global agricultural research system only began to catch up in a meaningful way in the 2000s. Changes in conceptualisation and understanding of gender are clearly set out, moving progressively further away from an exclusive focus on women in agriculture towards analysis of relationships between men and women in specific cultural, social and economic settings; from viewing the household as a single economic decision-making unit to a locus of different, even conflicting, priorities and objectives; and from simplistic categorisations of households by sex of household head to a recognition of the dynamics and diversity of household formation and the distribution of decision making within households.

Two gender gaps are evident here: the gap in men’s and women’s access to resources and services, and the ‘knowledge gap’ – ie the shortage of evidence on the nature and complexity of the gender gap, which has led to ill-informed policy-making to address it, and to the perpetuation of unchallenged yet unsupported assertions about the proportion of food produced by women. The chapter also restates four key messages from FAO 2011: women everywhere (though with significant regional differences) make essential contributions to agricultural production; consistently across regions, women have less access to assets and services necessary for efficient production and marketing than men; closing the gender gap can increase yields on farms managed by women and thus significantly reduce the number of hungry people in the world; and policy interventions (remove discrimination in access, invest in technologies to free up women’s time, enable women’s access in rural markets) can help reduce the gap. There seems little here that has not been said in various fora over the past three decades, but FAO 2011 and this volume do give us better supporting evidence.

The rest of the book comprises 16 chapters grouped in four parts plus a concluding chapter. Part II covers ‘Data and Methods’. Chapter 2 gives a helpful overview of a range of quantitative and qualitative methods for collecting and analysing gendered data, with examples of how a mix of methods tailored to specific contexts can help researchers unpick the complexities and dynamics of gender relations in agriculture. Chapter 3 focuses on the collection of quantitative data, specifically surveys and censuses, showing the importance of working out who (and how) to interview to allow the gendered nature of phenomena of interest to be revealed. The chapter author’s key objective here is to ensure that women are seen and their voices heard in any gathering of evidence in agriculture. Chapter 4 challenges common assertions about the proportion of labour and production that can be attributed to women and finds no hard evidence to support them; indeed, such assertions are based on a dubious premise that men’s and women’s contributions can be separated, which ignores the complex interdependence between what men and women do in the sector.

Part III, on ‘Gender, Assets and Inputs’, demonstrates in passing that much more needs to be done to close the knowledge gap: a frequent refrain is that most of the studies referred to in these chapters are
from sub-Saharan Africa, simply because gender-disaggregated data are not collected elsewhere. Chapter 5 presents a conceptual framework for understanding the role of assets in farm production, productivity, food security and future income opportunities. The following six chapters each focus on one of the main sets of assets in this framework: land, technological and natural, financial, livestock, social, and human (including gender differences in health and nutrition which affect the ability to engage in farm production and processing). Chapter 9, for example, offers an analysis of the different ways in which livestock can offer routes out of poverty, and the specific challenges of ensuring women have equal and secure access to livestock resources. Each of these chapters includes discussion of how such analysis can be used to inform policies that can help close the gender gap. The examples given are generally small-scale and local in nature. While this is in keeping with the need to design interventions to fit specific contexts, it leaves unexplored the broader question of whether the political will and structures exist to implement policies at national level that will disturb the power structures at all levels that sustain gender discrimination.

Part IV considers 'Gender and Markets'. Chapter 12 reviews evidence from efforts to reduce gender-based barriers to value chain development, with examples of different approaches. This helpful overview, the overall message of which is that without specific design to ensure gender equity in the development of modern value chains (eg in export horticulture based on smallholder contract farming), women not only do not benefit as much as men, but may even be left worse off than they were before. This broad analysis is followed in chapter 13 by a detailed look at evidence from two specific high-value commodities: cocoa in Ghana and coffee in Uganda. This concludes that women are trapped in low-value markets, because either lack of finance prevents their use of optimal production technologies or their small-scale and lack of access to transport means they sell in small quantities to local traders. Chapter 14 covers labour markets, documenting barriers to female employment in a range of rural contexts and the potential for replication and scaling-up of promising initiatives to tackle them.

Part V holds both promise and disappointment for anyone looking for insight into ‘Gender, Institutions and Policy’. It is surely in these areas that the key must be found to enabling both women and men to realise their full potential in agriculture. The promise is in chapter 15 which calls for a ‘paradigm shift’ in thinking: away from a focus on production to an understanding of agricultural and food systems which recognises the particular but interrelated roles of men and women. However the following two chapters (16 on agricultural research and 17 on access to extension) seem largely rooted in older frameworks. The former focusses on the fact that women are grossly under-represented in agricultural research posts, particularly at more senior levels, while the latter bases its analysis on an out-dated ‘transfer of technology’ framework.

A concluding chapter charts a four-fold way ahead for closing the knowledge gap (rather than the gender gap per se): improve the collection and analysis of sex-disaggregated data; continue to carry out empirical research on gender issues in agriculture; explore alternative design and delivery mechanisms to meet context-specific gender needs; and evaluate the gendered impacts of agriculture interventions.

There seems nothing very new in these conclusions or in hearing a group of researchers arguing the case for more research. It is perhaps inevitable, given the institutional context in which the volume was written, that political and power issues are conspicuous by their absence. More surprising is that gendered aspects of climate change and of ‘climate smart agriculture’ are not addressed; and that insufficient attention is given to lessons learned from efforts within the CGIAR system to tackle gender issues in agricultural research in a systemic way.

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Gender and Forests: climate change, tenure, value chains and emerging issues
Carol J Pierce Colfer, Bimbika Sijapati Basnett, Mariã«ne Elias, eds, 2016
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This compilation of research on gender and forests has been put together by CIFOR, with contributions from forty social and natural scientists from CIFOR and other research organisations. It includes detailed analyses of gender issues in the context of forest management in eighteen countries, as well as regional and global literature-based reviews. It offers a three-dimensional ‘gender box’ as an organising framework of themes: eleven issues (from local power dynamics and gendered roles, to national regulatory regimes), three scales (from micro to macro) and three time dimensions (past, present and future). An opening chapter helpfully locates each of the subsequent chapters within this ‘box’, giving an overview of coverage and a sense of some important issues that have so far received relatively little research attention.

The focus is on research and what it tells us about how gender relations and inequalities influence, and are influenced by, the ways in which forest resources are managed and used. Because some of the research looks at the process and outcomes of policies and interventions (in particular, reducing emissions from deforestation and forest degradation, plus fostering conservation, sustainable
management of forests, and enhancement of forest carbon stocks (REDD+). It also offers some insights into what does and does not work, and some of the unintended consequences of efforts to improve gender equality in forest resource management.

The chapters are grouped into five parts. In Part I, after the helpful opening chapter, Marylin Hoskins charts the evolution of academic understanding of gender in forestry and how that has influenced the development of interventions in community forestry. She is refreshingly honest about what she sees as shortcomings of programmes she has been a lead player in, including FAO’s Forest, Trees and People (FTP) programme, arguing for much greater participant involvement in design and monitoring of projects.

Part II – ‘Gender and Climate Change’ – comprises seven chapters. Here, the experience of REDD+ provides a rich seam of data and analysis. Chapter 5 reviews initiatives from several locations in six countries where concern has been raised that gender inequalities have been reinforced by REDD+ activity. Women’s participation in projects, the authors argue, is not enough to ensure equity in access and benefits. They propose four conditions that should be specifically met: (i) women have a strong voice in village decision-making; (ii) women have a strong role in forest rule making; (iii) women use forest resources at least as much as men; (iv) REDD+ initiatives take an explicitly gendered approach that recognises, for example, that women often use forest resources differently from men, and in ways that are often less visible to outside researchers and project designers. Other chapters comprise detailed case studies at local and national (e.g. chapter 4 on gender equality in forest policy in Sweden in the context of climate change) and local levels. Chapter 9 takes a dynamic perspective, exploring how drought-induced migration of men from an area around Lake Faguibine in northern Mali has led to the feminisation of forests, at the same time as a reduction in agricultural land through climate change has reduced women’s access to and control over agricultural resources. Women’s increased reliance on forest resources as an adaptive strategy, however, highlights their vulnerability to gendered regulatory regimes (e.g. around charcoal permits) and markets.

Part III is on ‘Gender and Tenure’. Its three chapters look at Liberia and Cameroon, India and Colombia. Each in different ways highlights how efforts to secure women’s rights to land and forest through reform at national or state level are often thwarted both by gendered formal legal and political structures and by more opaque processes and attitudes. Chapter 12 situates the push for equal land rights within a wider struggle for women’s rights in the Pacific lowlands of Colombia, and unpacks the complex interactions between divisions based on ethnicity, colour, class and gender.

Part IV looks at ‘Gender in Value Chains’, a neglected area of research particularly in respect of forest products. The first of its two chapters presents a thorough, systematic review of global literature on forest, tree and agroforest (FTA) value chains to address three research questions: where do gender differences exist in these value chains and what do they look like; what factors influence gender differences; and how can value chain interventions be made more gender equitable? The review reveals significant gaps in data: most of the studies do not record the sex of participants in the various stages in the specific value chains. Where data do exist, they show regional variations (greater involvement of women in Africa, and of men in Asia) but also that women are less likely to be involved in the more lucrative stages in the chain – and earn lower profit margins than men when they are involved in the same stages. From the studies that report on interventions in FTA value chains, the authors suggest three things that need to be done to ensure gender equity in outcomes: take an explicitly gender-sensitive approach to design; support collective action; and promote parallel actions such as to improve women’s literacy levels. The second chapter looks specifically at the emerging market in luxury bush meat that stretches from Democratic Republic of Congo to Kinshasa and Paris, and suggests that a greater recognition of the roles that women play in this market can be used as a basis for building new strategies and alliances for forest wildlife conservation.

Part V – ‘Longstanding and Emerging Gendered Issues’ – has three chapters that look, respectively, at intra-household sharing of knowledge, taking the management of shea in Burkina Faso as a focus; the way in which gendered patterns of migration affect community forest governance in Nepal and the constraints to women’s increased involvement in community forest management that come from their other gender roles; and gender in the context of oil palm development and controversies in Indonesia, where land grabs by big companies have disadvantaged poor women and men, hardened gender stereotypes and reduced women’s access to land that was formerly available to them for agriculture.

This book provides a rich vein of insight rooted in high quality research, yet remains accessible to a wide readership. Each chapter is complete in itself and draws out its own lessons for future research and interventions. The overall impression is of a fascinating range of research and reflection going on that somewhat belies the opening gambit of the editors that gender has been a neglected field in forest research. It is disappointing that the concluding chapter – ‘Looking forward in gender and forestry research and praxis’ – is a single page expressing uncritical optimism for a future of education for boys and girls that enhances understanding of, and interest in, both modern science and local knowledge, information technology and media that can support collective action and spread knowledge, new trade policies and regulations, and improved dialogue between interest groups that will ‘drive progressive socio-ecological transformation’. The previous 318 pages should give pause for thought about the struggles that still lie ahead if this utopian vision is to be realised.

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Transforming gender and food security in the global south


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This book claims to go beyond theory and analysis of gender issues to an understanding of how those issues can be addressed; and beyond agriculture to the wider concern about food security. As the editors say in the introduction: “the big question in the second decade of the 21st century is not whether gender equality can reduce food insecurity, but what strategies are successful in reducing gender inequalities”. In addressing this big question, the book explicitly addresses power relations, recognising that a failure to do so leads to “partial, apolitical, and gender-blind diagnoses of the problem of food and nutrition insecurity” which in turn leads to “inadequate policies”. The book is an outcome of 5½ years of research, funded by the Canadian International Food Security Research Fund (CIFSRF) from 2009, which supported 21 large-scale projects across the globe. The eleven chapters emerged from a rigorous process of inviting abstracts, writers’ workshops, peer review and editorial scrutiny. Forty-four authors contributed to the chapters. Because each report on a different context, there is inevitably some overlap in reviews of literature on gender in agriculture and food security, and in the description of methodologies. But their different theoretical framings, and the specifics of each context, create a rich variety of argument and analysis.

The editors set out their stall in an introductory chapter: “A unique feature of this collection is the integration of both analytic and transformative approaches to understanding gender and food security”. The analytic material shows how food security interventions enable women and men to meet the long-term nutritional needs of their households, and to enhance their economic position. The transformative chapters document efforts to build durable and equitable relationships between men and women, addressing underlying social, cultural, and economic causes of gender inequality. Taken together, these approaches enable women and men to reflect on the gendered allocation of labour and resources related to food, and to reshape these distributions in ways that benefit families and communities. However it is left largely to the reader to piece the evidence together to form a view of how transformation might work in practice and at scale; and the evidence gives a less optimistic view than the quotation from the editors implies, leaving the overall impression of how intractable gender inequalities are, particularly as one moves beyond the purely local context. Each chapter is focussed on a relatively local research, or research and intervention, project; and the final chapter which one would expect to bring the threads and lessons together is disappointingly short, at six pages.

Part I, on measurement and methods, comprises a single chapter: ‘Measuring women’s empowerment in agriculture’. The challenge of matching measurement to concept is seen from the start. Empowerment is defined as a process (p 22), but all the discussion about measurement considers it as an outcome: indices are reviewed and suggested which purport to reveal how empowered women are, and feel, at a point in time. Much of the chapter is about how a particular index, Women’s Empowerment in Agriculture Index (WEAI), has been adapted by CARE as an analytical and monitoring tool for its Pathways to Empowerment Programme. CARE’s adapted index recognises three key dimensions of empowerment beyond the issue of access to productive resources: agency, structure and relations. A mix of qualitative and quantitative methods is then used to collect data to measure empowerment in different CARE programme countries. Some of the qualitative measures seem overly simplistic, based on yes/no answers to questions about (for example) sole or joint control over income and resources; and the binary distinction between male and female-headed households is used without any discussion of its validity. It is interesting that the qualitative methods show a lower level of empowerment, and are better at revealing the intricacies of process, than quantitative measures. The latter are also dependent on weighting of indicators, based on equal weighting without any explanation of the rationale. The chapter highlights the importance of matching measurement and methods to the specific context and theory of change underlying an intervention.

Part II – ‘From Measurement to Action’ – has chapters on three different contexts: coastal aquaculture in Sri Lanka, finger millet production in Nepal, and community fish farming in eastern India. Each in its own way makes the point that gender issues differ in nature and degree between enterprises, even in the same area. In coastal communities in Sri Lanka, for example, established agriculture and capture fisheries have their own challenges to gender equality and women’s empowerment; the introduction of aquaculture with its specific requirements for land, equipment, training, labour and markets may bring a different array of issues. Without careful analysis of the current situation, and deliberate planning to address the issues identified, there is the risk that existing inequalities are reinforced and new ones emerge. Finger millet in Nepal is traditionally sown as an intercrop amongst maize and other major crops; its production and processing is labour-intensive and done mainly by women. Chapter 3 reports how participatory research led to the piloting of equipment for weeding and threshing, which women said reduced their drudgery and also increased the
participation of men in finger millet production. Chapter 4 takes us a step further to addressing the challenge of empowerment head on. By documenting an eight-year history of fish farming in community ponds in a set of tribal villages, the authors sought to find out if access to, and control over, natural resources make women socially and economically empowered. Their answer is sobering: local politics and a male patriarchal culture can overturn initially promising resource (re-) allocation to women, even when that process was initially achieved through women’s own initiative and efforts, thereby reinforcing gender inequality and poverty among women. None of the chapters uses the index-based methodology of chapter 2; they each show how participatory methods are essential if one wants to understand the nuances and complexities of gender dynamics over time.

Part III has three chapters under the title ‘Placing gender in local institutional contexts’, based on research in Ethiopia, Cameroon and Peru, the latter two of which do take us a small step forward from analysis to an understanding of how transformation might happen. Chapter five explores the “complexly gendered” nature of coffee ceremonies in Ethiopian villages. While these are carried out by women, most of the benefits seem to accrue to men through establishing their social status and consequent claims on resources and labour. However, the quality of coffee and snacks offered maintains social hierarchies and relations that underpin labour-sharing between households, to the benefit of both women and men. The market in wild forest foods in Cameroon involves both men and women throughout the chain from collection, through processing, to selling on the streets of urban centres. The analysis in chapter 6, however, identifies the different constraints and opportunities facing men and women, leading to suggestions that interventions focussing on women’s roles and their access to credit can contribute to women’s empowerment as well as to food security. Chapter 7 offers a new perspective on innovation in potato value chains. By documenting the ‘life journey’ of women who emerge to leadership roles in the market chain for native potatoes, it neatly illustrates the interaction between structure and agency, and how changes in structures can create space for women to assert their agency in new ways. While interventions have had some impact on empowerment locally, more needs to happen at macro and meso levels to challenge market structures and regulatory regimes that are resistant to gender equality.

Part IV carries the ambitious title ‘Approaches to transforming gender relations’. However the amount of transformation achieved in the four projects reported is small, leaving the overall impression (as acknowledged in one of the chapters) that one should not expect too much change in deep-rooted gender issues from research projects focussed on agriculture and food security. In some settings other relational issues – between generations, for example, or between groups based on ethnicity or location – may be more important to address in seeking improvements in agricultural output and food security. Nonetheless, the four chapters, based on research in Tanzania, Bolivia, Malawi and Kenya, combine to show how participatory action research can lead to an iterative move towards understanding, and actions that redress to some extent power imbalances between men and women. Chapter 8, which focusses on a goat project, also makes the important cautionary observation that the very presence and activity of a research team can inadvertently introduce new hierarchies and dependencies, with external concepts and language distorting local understandings of gender relations. It is important, the authors argue, to elicit locally valued indicators when monitoring process and outcomes of interventions. The potential contradiction between participatory approaches that seek to respect local norms, perspectives and leadership, and the desire of researchers to challenge unequal relations is explicitly recognised in some of these chapters.

The concluding chapter argues that agricultural and food security research, and the interventions that this research informs, has conventionally taken social norms and culture as given and looked for ways to work within them. A transformative approach to research aims rather to challenge and change. The authors acknowledge, though, the long-term nature of these ambitions. They propose four priorities for achieving “gender transformation in agriculture”:

(i) invest in rigorous analysis of the underlying causes of gender inequality, including the subtleties of relations between men and women and the meanings attached to gender roles in specific contexts.

(ii) develop mechanisms to move from analysis to change, which will differ depending on the relative importance in different contexts of gendered identities, interactional issues within households and broader institutional constraints.

(iii) invest in partnerships and capacity to ensure research teams have the skills, perspectives and traction within particular contexts to facilitate both analysis and change.

(iv) evaluate agriculture programmes from both technical and gender transformative perspectives, assessing the extent to which interventions accommodate or transform gender norms, roles and relationships.

The final sentence of the book sums up the challenge: “Both careful analysis and committed transformational work are essential to move towards a more equitable world”. What the book does not make clear is where the role of agricultural research in this transformation begins and ends. Perhaps we do a disservice to agricultural researchers by expecting them to achieve fundamental social and political change – and then criticising them for failing to do so.

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Women in cooperative agriculture in Lesotho

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Abstract

This paper is about cooperative agriculture in Lesotho which various governments, from colonial times to the present, have promoted as a vehicle for meeting national development and food security goals. Drawing on case studies of four multipurpose agricultural cooperative societies, the paper details how women especially, but also men faced with unemployment in the mines in South Africa (and therefore lack of farm investment options), were able to use their society membership to transform their farming from a part-time subsistence activity into a modern commercial activity with potential for growth and/or investment in other income earning activities. The paper reveals the dynamics of how this form of cooperation worked both for women and other members, most of whom knew one another, and for the societies themselves.

Introduction

Women have long been recognised as playing significant roles in agriculture and household food security, particularly in what became known as migrant labour societies in Southern Africa, where the system of labour migration often took men away from the farm for long periods. While country and regional dimensions varied, in countries where a worker-peasantry developed such as Lesotho, South Africa and large parts of Zimbabwe, the migration of men meant that wives – the ‘farmer-housewives’ (rural-based women left behind) (Potts, 2000) – had to bear the burden of agricultural production. Agriculture became seen as a low status, domestic chore that was the responsibility of women, children and the elderly, while men were expected to make money in urban areas (Boehm, 2003). In reality, low wages meant that agriculture was needed to supplement men’s remittance income (Duggan, 1980; Potts, 2000) suggesting that it ceased to be a part-time and subsistence activity, “insufficient to meet family needs” (Potts & Mutambirwa, 1990).

In Southern Africa the situation has changed following economic and structural changes in the post-1990s. Retrenchments from the South African mines in the 1990s in particular, have impacted negatively on the migrant labour communities in countries like Lesotho, and notably for women who had to find alternative sources of income (Ulicki & Crush, 2007). Precisely what ‘farmer-housewives’ did and how they did it in the absence of remittance income from ‘worker-peasant’ men is not known (Potts, 2000). Were these women able to continue treating agriculture as a part-time, subsistence activity? Did the changing economic and livelihood situation for households result in a changed role for agriculture, and for women in agriculture? These questions become even more relevant in the context of reported increases in poverty especially of women-headed households in these communities (Gustafsson & Makonnen, 1993). As a response to some of these challenges, women and men, together and separately, found in certain agricultural cooperatives an institution that provided the resources and inputs that enabled them to organise agriculture into a modern, commercial activity that generated cash income.

In Lesotho, agricultural cooperatives have a long pedigree. From the colonial to the post-colonial era, governments have promoted agricultural cooperatives as a vehicle to achieve national development and food security goals. While these were what others would call “state invented tools meant for implementing planned development activities” (Getnet & Anullo, 2012), “in settler colonial societies much of the land is farmed in ‘collective’ units and there is ‘co-operation’ in the labour process, although private appropriation of surplus value” (Bush & Cliffe, 1986). Thus, voluntary agricultural cooperatives inspired by these community (communitarian?) principles formed alongside more grandiose schemes.

The women farmers who joined these agricultural cooperative organisations are the main concern of this paper, which examines the dynamics of cooperating in agriculture for women and other members. Using detailed case study material from four agricultural cooperatives in Lesotho’s Berea, Leribe and Maseru regions, evidence is presented of how agricultural practices and the role of women in agriculture changed through the cooperative model. The paper argues that some women were able to respond dynamically to changing social and economic circumstances by transforming their agricultural practices, and taking advantage of the benefits of cooperatives to build economic opportunities through agriculture.

The remainder of the paper is organised as follows. First, an overview of the four cooperative societies is provided, together with a brief discussion of cooperative membership and land access. This is followed by a discussion of the main benefits for cooperating, particularly for women, and presents details of the processes involved for different categories of women. The conclusion argues that women, like men, responded to...
changing socio-economic demands and transformed their agricultural practices, and found, in cooperatives, institutions that could organise them out of poverty.

Cooperative membership and land access

In order to understand the changing role of Basotho women in agriculture, and the dynamics of agricultural production and cooperation, we turn to our four agricultural cooperative societies. These multipurpose agricultural cooperative societies are located in lowland Lesotho – the first two (the Mosalem ane Multipurpose Cooperative Society – MMCS and the Popopo Multipurpose Cooperative Society – PMCS) in the Mapoteng area in Berea District, the third (the Maphiri Farmers’ Cooperative Society – MFCS) in the Likhakeng area in Leribe (all in northern Lesotho), and the fourth (Khitlong sa Tloutle Multipurpose Cooperative Society – KTMCs) in the Roma Valley in Maseru District (central Lesotho). These three districts comprise lowland and foothill rural communities which have the highest concentration of households, of which a large majority are women-headed, mainly as a result of widowhood (Mba, 2002). These districts, being located in Lesotho’s prime farming regions, also presented ideal conditions for the production of a range of crops, including maize, wheat, legumes and vegetables, which could be marketed to generate income (Figure 1). Equally, their location on the fringes of urban centres (Tiyateyaneng in Berea District, Hlotse in Leribe and Maseru City) and available road infrastructure, allowed them access to a wider market, including Maseru City and surrounding rural communities. While these cooperatives produced mainly cash crops, not all crops were marketed as part of the harvest was used to achieve household food security. Although the majority of Basotho households are heavily concentrated in rural areas and continue to depend on agriculture for livelihoods, a large proportion face perennial food security challenges. As others have shown, households headed by women form the majority of these households (Braun, 2010).

Figure 1. Land available to cooperative members.

In general, both summer and winter crops were sown in these cooperatives, and both men and women produced these. While summer crops were produced under rain-fed conditions, vegetables, legumes and other winter crops were grown under irrigation, and were often sold. Thus, even when the traditional farming season had ended and summer crops had been marketed, cooperating farmers gained income and consumption advantage from year-round production. Besides year-round production, three of the cooperatives also provided inputs for members who also benefitted from output marketing activities. In a cash economy like Lesotho’s, which was entering “a new ‘transitional’ phase, consisting in part of ‘deindustrialisation’, the proletarianisation of women, as well as a diversification of livelihood strategies” (Boehm, 2003) in the 1990s and 2000s, the agricultural cooperatives provided a livelihood pathway where women and their households could satisfy both cash and consumption objectives.

These multipurpose agricultural cooperatives were engaged in modern, commercialised, and at times, technically-oriented agriculture. However, they were still voluntary organisations, established and run by members, with benefits accruing to members. Elsewhere, Getnet & Anullo (2012) categorised such institutions as “Third Generation Cooperatives necessary in order to promote competitive participation of the rural poor in production and marketing activities”. This means that cooperative societies were grassroots-based and self-help organisations, constituted by local individuals and sometimes neighbours, all of whom had common interests and objectives. Literature has shown that such grassroots forms of organisations can have positive livelihood benefits for cooperating members, and the expected benefits have considerable influence on people’s decisions to become co-operators. Cooperating households in the four cooperatives covered here can be defined in terms of these perceived benefits. In cases where cooperative membership was held by the household, households were represented by wives in the absence of husbands. Others joined on their own as heads of households.

The four multipurpose cooperatives were all registered with the Registrar of Cooperatives and enjoyed recognition by the Department of Cooperatives as mutual beneficial voluntary local associations, which qualified them for bulk purchases or subsidised inputs from the open market or government entity (LEMA), and equipment like tractors and cultivators. The government, through the Ministry of Agriculture and Food Security, operates a 50 percent input and equipment hire subsidy to traders and recognised groups, but the scheme is cumbersome, inadequate and inconsistent, and over the years forced farmer groups to source their own inputs and equipment. Membership of these societies was open, but was skewed towards households from the same neighbourhood, and women were better placed than men to participate as the main participants in agriculture.

Women and cooperative membership

A range of actors was involved in the four cooperatives, including individuals and households, and both men and women (Figure 2). It would seem, after witnessing the challenges in the South African migrant labour market and the local economy, men and women capitalised on the income-earning opportunities offered by commercial agriculture by forming voluntary agriculture cooperatives. The majority of co-operators were neighbours who were involved full-time in the cooperatives and had contributed land, but there were also people who were not fully involved in the cooperatives and...
others who owned no land. This was particularly a period of transition in Lesotho, characterised by the proletarianisation of women (Boehm, 2003). No surprise then that women farmers were found across the four cooperatives, including those that were formed early, like the MMCS formed in 1993, and consisted of both single mothers and married women.

In contrast, comparatively few women participated in cooperatives founded early in the 1990s. While women still participated in cooperatives in the 1990s as shown in Table 1, cooperative membership was highly differentiated by gender, with only a small proportion of women and a large number of men. According to key informant sources, many women would not consider joining cooperatives because of the politics around their formation. The MMCS for example, was a political project of the then Member of Parliament for Mapoteng and also Minister of Agriculture, Mr Ntsukunyane Mphanya, who responded to the Basutoland Congress Party (BCP) government’s call for the revival of agricultural cooperatives and its pledge to support such projects through loans from the Land Bank. This reinforced men’s involvement in the cooperative society as highlighted in Table 1. This section explores the gender dynamics in the four cooperatives, starting with cooperative membership, before examining cooperatives and the different forms of land access.

At formation in 1993, the MMCS had 15 members, and while the membership later grew to about 300 after 1996, it had declined to 15 active members (60 percent men and 40 percent women) by 2012. The PMCS membership had grown from 17 in 1996 to 21 in 2012 (67 percent women and 33 percent men): 46 percent of the women were heads of households. Like the PMCS, MFCS had a higher female membership (67 percent) than male (33 percent), and membership had been steadily maintained at 21 since its formation in 2004. Of the women members, at least half were heads of households, while 14 percent of male members were young and unmarried. Finally, KTMCS, the largest cooperative in terms of membership, had a female membership of 62 percent in 2012. In the context of high levels of unemployment in Lesotho, 48 percent of the male members were still young (between 25 and 39), while the majority of women were between the ages of 26 and 65.

While overall, 60 percent of the membership of these four cooperatives was female in 2012, 40 percent of the women were de jure heads of households and 30 percent were de facto household heads. The remaining 30 percent were married and living with resident husbands. This membership reflects the dynamics within Lesotho society in general. The proportion of single women also reflects the proportion of single parent-headed households more generally.

**Cooperative societies and land access**

Much of the literature on women in agriculture has argued that lack of land rights, and especially access to land for women, is a major contributor to rural poverty (see, for example, Agarwal, 1989, 1994, 1998, 2003). A key strand of this argument is that rural women are especially vulnerable, faced with risks of land entitlement failure in patriarchal societies. Access to land is often considered among the factors that influence households and individuals to enlist in cooperatives, and this should apply in a country like Lesotho where land is in short supply. Connecting case data to the above argument brings to light the crucial question of how cooperative members, especially landless women, accessed land and engaged in their agricultural production.

The major asset available in the four case study multipurpose cooperatives was land for agricultural production. Although there were variations in landholdings, with MMCS having 15 ha, while the other three exceeded 30 ha, larger holdings were more common than smaller ones. Land was either rented from local landholders or pooled in the cooperatives by members themselves. As highlighted in Table 2, in 2012 the KTMCS’ operations covered 38.6 ha of land, organised in consolidated blocks and rented by the cooperative from different landholders in the Roma Valley. In contrast to the other three cooperatives, the KTMCS provided an access route for land-poor individuals and households, and particularly young families, to negotiate land access. Similarly, women were more likely to find it easy to access land through cooperatives than in the communal areas, where landholders only entered into sharecropping arrangements with big farmers. Indeed, 87 percent of the women had no access to farming land in the communal area. Thus, cooperative members gained access to land either by paying cash rent in advance, or via a crop share agreement with payment made at the end of the season (the standard formula was 3 bags for every 10 bags produced).

<table>
<thead>
<tr>
<th>Society</th>
<th>Membership at inception</th>
<th>Current Membership</th>
<th>Number of Women</th>
<th>Number of Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMCS</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>PMCS</td>
<td>12</td>
<td>14</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>MFCS</td>
<td>14</td>
<td>14</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>KTMCS</td>
<td>51</td>
<td>35</td>
<td>35</td>
<td>21</td>
</tr>
</tbody>
</table>

Figure 2. Cooperative members.
There were, however, slight differences in the MFCS, with farmers pooling their land and then working as a collective rather than as individuals. The total land pool was 40 ha, with each farmer contributing an average of 1.9 ha to the common pool. Here, women, usually heads of households that held land but could not fully utilise it, kept their land by joining the cooperative. This was women’s ways of circumventing dispossession in line with provisions of the country’s land statutes. In Lesotho, married women are not forbidden from inheriting communal land allocated to their households after the death of husbands, and 64 percent of the women members of the MFCS were de jure heads of households who held land, while 46 percent were custodians of household land.

The case of Mampho illustrates how women used cooperatives as security for their landholding. Mampho, was 58 years old in 2012, widowed and an active member in the MFCS. She had lost her husband who had worked in the mines, in 2000. Mampho had inherited the family land after her husband’s death and she rented this land to sharecroppers. However, “sometimes there were no sharecroppers and the land would lie idle”. To avoid the threat of dispossession, she joined and contributed her land to the cooperative in 2004, and through the support from the cooperative the land has been in constant productive use.

MMCS had the smallest land area at the time of research in 2012. This area was mainly made available to the cooperative by the 15 members remaining in 2012. The land use arrangement within the MMCS and the PMCS differed from the other two cooperatives, with individual farmers bringing their land into the cooperative and working it as individuals. Through this method farmers were able to access inputs and take advantage of cooperative access to the market. For example, the women who remained with the MMCS said that there were advantages in remaining in the cooperative rather than farming outside the cooperative system. To them, involvement in cooperative production meant that they continuously put land into production through access to cooperative resources, including use of tractors.

In general, the farmer cooperation strategy was intended to achieve economies of scale as well as to enable poorer farmers, who were frequently women, to benefit from scientific farming methods, including access to inputs. Most women said they did not have the financial capacity to invest in soil fertility improvements, or in the purchase of machinery, and cooperation fostered investment in land through conservation measures (see Table 2), access to capital investments including equipment and related agricultural inputs.

Other important aspects of landholding and use in the four cooperatives, which were not popular in the communal areas, included the practice of conservation agriculture that included terracing, grass buffering, erosion control and water harvesting. Table 2 provides details of land sizes, holding patterns and use, and the types of inputs available to members. As shown in the table, the benefits of cooperative membership lay in prudent land use practices and investment in inputs, particularly seeds and chemical fertilisers.

**Benefits of cooperative membership**

The benefits of cooperative membership could be witnessed through average cereal inputs per individual cooperative farmer member during what farmers considered as the worst, moderate and good agriculture seasons (Table 3). Results from the case studies show that farmers who engaged in the cooperatives, whether through contribution of own land or renting, or working land individually or with others, managed to record a harvest even during the ‘worst’ agriculture seasons. While outputs per farmer were still low during these seasons, overall performance during ‘normal’ and ‘best’ seasons was generally impressive. As shown in Table 3, farmers could expect a harvest of at least two bags (of either 70 or 80 kg) of cereal, even during a very poor season, at least 10 bags in a normal season, and even more during the best seasons. The possible explanations for this could be access to and use of inputs (both chemical fertilisers and seeds); farmers mostly used PAN maize varieties and compound fertilisers. However, having access to cooperative resources did not automatically guarantee farmers the ‘best’ possible harvest, as they had to be physically present to work and manage the land. In the case of farmer members with full-time jobs elsewhere, additional workers had to be hired. Women would make use of family labour including that of kin networks, who were often rewarded with grain at the end of harvest. An example was MaPolo, who had reduced her cooperative time in 2012, and was represented by her daughter and two sons and her neighbour, MaNtebo, who has been assisting her in the cooperative since 2006.

### Table 2. Land registered within the cooperatives and pattern of use in 2012.

<table>
<thead>
<tr>
<th>Society</th>
<th>Size¹ (ha)</th>
<th>Holding patterns</th>
<th>Individual use/consolidated?</th>
<th>Use patterns &amp; investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMCS</td>
<td>15.0</td>
<td>Individual &amp; pooled</td>
<td>Individual</td>
<td>Terracing, grass buffering, erosion control, water harvesting, modified seeds (PAN 6975, 4M-19), chemical fertilisers 3:2:1(25)</td>
</tr>
<tr>
<td>PMCS</td>
<td>30.1</td>
<td>Individual &amp; pooled</td>
<td>Individual</td>
<td>Terracing, grass buffering, erosion control, water harvesting, modified seeds (PAN 6363, CG 4141), chemical fertilisers 3:2:1(25)</td>
</tr>
<tr>
<td>MFCS</td>
<td>40.0</td>
<td>Individual &amp; pooled</td>
<td>Individual</td>
<td>Terracing, grass buffering, erosion control, water harvesting, modified seeds (PAN 2778, 6017), chemical fertilisers 3:2:1(31)</td>
</tr>
<tr>
<td>KTMCs</td>
<td>38.8</td>
<td>Leased by co-op</td>
<td>Consolidated</td>
<td>Terracing, grass buffering, erosion control, water harvesting, modified seeds (PAN 4410), chemical fertilisers 3:2:1(31), infrastructure</td>
</tr>
</tbody>
</table>

¹Size/ha refers to total land area covered by the coop either pooled by cooperative members or leased by the cooperative.
Other concurrent benefits could be identified, notably investment from intra-cooperative loans and livelihood diversification resulting from the loans. These benefits were particularly valuable to women heads of households in the absence of remittances and financial support from men. Most women in the cooperatives were widowed, separated or married to non-working men, and did not have any other financial support. They therefore relied on cooperative loans as a source of investment. Although these women in large part had no men on whom they could depend, literature has shown that even wives with migrant husbands do not receive sufficient money for domestic and other uses, and certainly not for farm investment. Others may “receive none for long periods, and some say that their husbands have simply disappeared, leaving them technically married but with no financial support” (Gay, 1980).

A key source of this loan income stream was cooperative financing through member registration fees, share capital and interest repayments from loans. With the challenges associated with access to traditional and non-traditional sources of finance, including bank loans, these cooperative societies have looked inward for finance and extracted different amounts in registration fees and share-capital, depending on their financial needs. Membership fees and share capital provided a stable annual income that was critical for meeting fixed running costs given the variability of income sources. These difficulties varied from society to society, depending on their particular financial needs and responsibilities. Thus, financial capital was highly dependent on how the societies exploited the income source mix of membership fees, loans dispensed to members and repayment rates, and share capital. Internal loans emerged as a major reason why some cooperatives had a stable membership: cooperatives that operated an internal loan system had a stable membership while the MMCS, which had stopped issuing loans to members, experienced a high turnover of members.

However, what emerged as especially interesting for this paper were the investments in alternative livelihoods made by members who took loans. Investment levels varied considerably across the four societies depending on the viability and maintenance of the loan system, but loans were invested in livestock projects like establishing a piggery or a poultry unit. Alternative livelihoods chosen by members conformed to societal norms and expectations, with men investing in large livestock like cattle, and women concentrating on poultry and pigs. There appeared to be a general boom in both piggery and poultry projects in the women-dominated societies such as KTMCS (41 piggeries and 23 poultry units); PMCS (7 piggeries and 5 poultry units) and MFCS (5 piggeries and 12 poultry units). However, male members of these three societies were more likely to invest in pigs than poultry. On the other hand, no MMCS members invested in pigs or poultry.

In addition to investing loans in agriculture, women members also diversified outside the farm into informal trading. While it has long been normal practice in Lesotho for households to invest their agricultural income in non-farm activities, a number of female cooperative members were using their incomes from their agricultural activities to finance cross-border trading activities. In 2012, 19 percent of female members reported that they bought clothing items, fabrics and chinaware from Johannesburg in South Africa for sale in Lesotho. At the same time, and perhaps even more interesting, just over 20 percent of female members had invested in rental rooms known locally as malaene (Thebe & Rakotje, 2013). A small number of women held full-time jobs and were not involved full-time in the activities involving the cooperatives. These included teachers (11 percent), civil servants (7 percent) and textile workers (6 percent). Women rather than men have long dominated the textile labour force in Lesotho.

### Conclusions

In Lesotho, women have long played a prominent role in household food provisioning as ‘gold widows’ (wives of labour migrants) (Boehm, 2003) and de jure heads of households. However, in a cash economy, farming came to occupy a position both subordinated to and highly dependent on incomes from male migrant labour. The shift from subsistence to commercial production in the 1980s, and especially in the 1990s, was largely dictated by the loss of this migrant income following retrenchments from the South African mines.

The male and female members, sometimes spouses, of...
agricultural cooperative societies made use of opportunities offered to secure livelihoods, generate income, ensure food security, and more importantly, for accumulation. They used a variety of strategies to negotiate constraints imposed on them by society: some chose to bring their land into cooperative production, others joined cooperatives to gain access to land, and all used cooperatives to negotiate access routes to productive resources. Cooperatives were thus seen as social organisations through which productive agriculture could be carried out for certain groups. They provided a pathway not only to food security, but also, income generation in an era where the proletarianisation of women was gaining momentum (Boehm, 2003).

In each of the four case study cooperatives, land access and production was guaranteed through land leases and pooled resources, and either individual or consolidated use, and this was a major attraction to the farming members of the cooperatives. In their support for the use of improved farm management practices, the societies were more or less successful although members who were able to negotiate a loan for the required inputs, including labour, to do the work involved, performed best.

References


A focus on women

Scientists around the world are increasingly aware of the need to take gender into account when conducting research intended to benefit poor rural households. As is described elsewhere in this publication, the CGIAR Centres and Programmes have developed a wide variety of mechanisms and activities to ensure that the interests and perspectives of women are adequately considered in research design and execution. In a similar fashion, the Centres affiliated with the CGIAR’s sister organisation, the Association of International Research and Development Centres for Agriculture (AIRCA), see http://www.airca.org/), have also increased the attention they give to gender in their programmes. There is now a much greater focus than ever before on research that takes into account the different needs, challenges and opportunities facing women and men producers and consumers. There is also a widespread recognition that, in order for research to truly get to grips with the issues involved, a greater number of women scientists need to become actively involved in agricultural research, a pursuit that in many countries remains largely a male-dominated domain.

This article looks briefly at examples, from just four of the AIRCA centres, of how their programmes are focussing on women.

Enterprising women helped to make batti

The International Network for Bamboo and Rattan (INBAR) was established in 1997 to develop and promote innovative solutions to poverty and environmental sustainability using bamboo and rattan. Women, especially in Asia and Africa, have long been principal beneficiaries of the institution’s programme. One example of this is the work with rural women’s self-help groups in India. With support from the Overseas Development Institute (ODI), International Fund for Agricultural Development (IFAD) and the Canadian International Development Research Centre (IDRC), INBAR has established a number of such groups, in which rural women come together and, with appropriate training and support, develop and run income-earning ventures.

In one such group in Tripura State in northeast India,
women received training on how to make incense sticks (batti) at the Tripura Bamboo and Cane Development Centre, a local research and development institution that was established, with INBAR support, in 2003.

Based on the training received, the self-help group took out a small loan and set-up their own business making batti. The loan was quickly repaid and the group started producing charcoal from bamboo waste for use in batti making. The Centre for Forest-based Livelihood and Extension provided the women with seedlings to grow their own bamboo. They also provided saplings of the Indian laurel tree, Litsea glutinosa, sometimes called the Bollywood tree, which is the source of jiggat, a powdered gum that is used in making the incense sticks. The project has resulted in an increase in household income of some 450 percent for those who participate full time in the self-help group’s activities.

Training women scientists in the Middle East and North Africa

In the Middle East and North Africa (MENA) region, the proportion of women employed in agriculture-related activities has risen from 30 percent to nearly 45 percent since the 1980s. Women are also playing an increasingly important role in science and, according to UNESCO, the number of female students pursuing science and technology studies continues to increase year on year. Despite these advances, however, women in the region remain woefully under-represented in senior management and other leadership roles in agricultural research.

To address this issue, in 2016 the International Centre for Biosaline Agriculture (ICBA) launched a novel leadership program for Arab women scientists, the first of its kind in the region. Known as Tamkeen, (tamkeen being Arabic for ‘empowerment’), the programme is funded jointly by the Islamic Development Bank and the Bill & Melinda Gates Foundation. It addresses a wide range of challenges facing Arab women scientists, and aims to improve leadership opportunities, provide mentoring, and contribute to the long-term goal of increasing women-led research to improve food security.

As the first event under this programme, in April 2017 ICBA hosted a training course for female researchers from Algeria, Egypt, Jordan, Lebanon, Morocco, Oman and Palestine, at its head office in Dubai.

Ms Heba Al Faris, a participant in the course who heads the Department of Plant Production and Protection at An-Najah National University in Palestine, said:

“Around 70 percent of the women in my country are involved in agricultural work, but you can hardly see them in leadership roles. In the scientific field, one of the main challenges faced by Arab women scientists is fundraising for their research projects. Due to their limited roles as leaders, they often feel isolated and are hardly seen as leaders or the principal investigators for a research project. To be a successful leader, a woman scientist needs to be provided with funds, tools and good research skills.”

Dr Ismahane Elouafi, the Director General of ICBA, is well known for her long-term commitment and contribution to promoting science and innovation, especially among Arab women. In recognition of this, in 2016, she won the prestigious Arab Women of the Year Award for Achievement in Science. She was presented the Award at a high-profile ceremony in London attended by Gulf royalty, diplomats, British politicians, and prominent business leaders.

Women growing vegetables at home can improve family nutrition

Bangladesh has achieved a marked decrease in both poverty and hunger in recent years, albeit from initially high levels. The prevalence of undernourishment decreased from 34.6 percent in 1990-92 to 16.8 percent in 2010-12. Yet malnutrition in rural Bangladesh is still among the highest in the world, and vegetable consumption remains well below the WHO-recommended level.

Increasing vegetable production in home gardens, often the responsibility of women, is commonly regarded as an important means of improving household nutrition. However, as hard evidence for this is largely lacking, the World Vegetable Centre recently conducted a study in Bangladesh to assess the effect of improving women’s household gardens on vegetable production, household consumption, and dietary diversity.

With USAID support, the World Vegetable Centre, over several years, trained several thousand Bangladeshi women in vegetable production, processing and nutrition. Each participant was visited after the course and offered practical assistance in setting-up or improving her vegetable garden. The project focussed on the introduction of nutrient-rich vegetables suitable for growing in a home garden. These included varieties of water spinach (Ipomoea aquatica), Indian spinach (Basella alba), stem amaranth/red amaranth (Amaranthus spp), okra (Abelmoschus esculentus), yard-long bean (Vigna unguiculata subsp sesquipedalis), cucumber (Cucumis spp), sweet potato (Ipomoea batatas) for vines and young shoots, and bitter gourd (Momordica charantia).

This study tested whether the women’s training and support had contributed to increased production and consumption of vegetables, and what the impact had been on family nutrition. The study was based on a comparison of data collected from 103 women who received training in nutrition and in setting-up a homestead vegetable garden, and 479 women who did not.

The study found that training and subsequent support:

- nearly doubled the area planted per home garden;
- substantially increased vegetable production (eg leafy vegetable production increased 71 percent);
- resulted in a small but significant increase in the diversity of vegetable consumption;
- increased the supply of plant proteins by 150 percent, iron by 186 percent, and vitamin A by 248 percent; and
- strengthened women’s control over the homestead garden and significantly increased their involvement in activities that involved money.

The study concluded that measures to expand the growing
of vegetables by women in home gardens are indeed likely to result in improved family nutrition.

**A new Science Strategy for CABI**

In May 2017, CABI published a new Science Strategy, in which the critical importance of addressing gender and diversity issues is highlighted. Gender considerations are to be integral throughout all research projects from initial design to implementation and evaluation. Appropriate analyses will be carried out at the start of all projects to ensure gender and diversity considerations are fully embedded and budgeted. A gendered value chain analysis may also be undertaken where relevant, to understand the differential involvement of men, women and youth in the value chain, and any opportunities or barriers to increasing their involvement.

*CABI* aims to increase its knowledge and awareness of gender and diversity issues through addressing research questions such as:

- What are the motivators and drivers for women and men to uptake a technology, including suitability of design, effects on time and labour burdens, cost, decision-making and cultural suitability?

- Do the same factors prevent women and men from increasing their productivity of a certain crop and how can we address these barriers?

- What factors influence women’s management of assets and resources (including money), and how can or will the project influence or affect these?

- What communication methods are most suitable for women, men and youth and why, and how is information shared both within a community and within a household?

- How will existing social norms influence or affect project implementation and how do we adapt implementation to ensure we achieve our goals?

It is through addressing questions such as these that *CABI* aims to ensure its research fully recognises that women, men and youth have different needs, drivers and priorities governing their interests, motivations and decision-making.

**Two new Directors General for CGIAR Centres**

And finally, some news from the CGIAR recent months have seen the appointment of two new Directors General.

In October 2017, Dr Claudia Sadoff took up her new position as Director General of the International Water Management Institute (IWMI). Prior to this she served as the World Bank’s Global Lead for Water Security and Integrated Water Resources Management. In this and earlier leadership roles at the Bank, she has coordinated major initiatives dealing with water issues in Africa and Asia and most recently, she has led major studies on water security in the Middle East and on water management in fragile and conflict-affected states.

Claudia earned her doctorate in economics at the University of California at Berkeley, and a master’s in international affairs at Columbia University. She has also served as a Distinguished Visiting Scholar at the University of Oxford.

She succeeds Dr Jeremy Bird, who will return to the UK after completing a 5-year term that included development of the IWMI Strategy 2014-2018, Solutions for a Water-Secure World and the launch of the CGIAR Research Programme on Water, Land and Ecosystems (WLE).

Dr Yvonne Pinto, Board Chair of WorldFish, recently announced the appointment of Dr. Gareth Johnstone as the incoming Director General of WorldFish. Formerly the institute’s Country Director of Myanmar, he will take over from the current Director General, Dr Blake Ratner, in January 2018.

Gareth has a wealth of experience working for, among others, the European Union, FAO, UNDP and WWF. A UK national, he has lived and worked in many countries including Cambodia, Indonesia, Mozambique, Myanmar, Sudan, Tanzania and Zambia. He holds a BSc in Zoology from the University of Sheffield, an MSc in Environment Assessment and Evaluation from the London School of Economics and Political Science, and a PhD from King’s College, London.

**Geoff Hawtin**
Web Manager’s Update

Since our report in *Ag4Dev31*, which outlined our plans for a re-design of the TAA and updating of the TAA webpages, we have made progress. However, this is a slow process and we ask members to be patient. Hopefully, we shall be able to go on-line with the new design early in the New Year.

Our web developer prepared several options for a new front page. These were shared with several ExCo members. Based on the responses, the designs were modified and reviewed at the ExCo meeting on 20th September. The favoured version comprises a simple front page, with minimal text. It will have three pictorial buttons ‘Who we are’, ‘What we do’ and ‘Our membership’. Each of these will link through to a subsidiary home page that covers topics under the general heading selected. Each of these will have click-through pictorial buttons to enable the viewer to drill-down to the ‘meat’ of the website related to the specific topic. The front page itself will include ‘Latest news’ and ‘Latest publications’. A footer will include a site map, feedback form, search facility and ‘Contact us’ options. The website header will be as illustrated below. The new site will be mobile-friendly.

We are proposing to alter the strap line of TAA to ‘Agriculture for sustainable development’ (inserting ‘sustainable’) and to condense the description of the TAA. There may be other alterations that arise from the results of the 2017 Questionnaire Survey, which will need to be incorporated.

Membership Secretary’s Update

Following the increase in membership fees, with effect from 1st August 2016, there has been a period of readjustment for members to make additional payments. This has led to an increase in workload communicating with members and updating the members’ database as payments were made. However, we are pleased to report that the majority of members have now updated their Standing Orders, made additional payments, and have become ‘active’ members of the TAA.

Annual Membership Report 2016-17 (Data collected 30th June 2017)

Active members with up-to-date payments total 422, with 74 of these listed as new members – which is very encouraging. In addition, there are 65 Standing Order payments of between £5 and £20 from former members, who have not responded to correspondence. Therefore, some payment has been received from 487 members.

Some 248 members are listed as suspended (ie have not paid anything) and these have been contacted several times. The increase in annual payments made via PayPal or BACS means that there is an annual chase for money, and some inevitable instability in membership numbers. **Annual payment by Standing Order remains the most efficient payment method** for both members and membership secretary, so please consider arranging this with your bank, if you do not already pay by this method.

Many of the suspended members are former students who may have moved on, and we question why they do not maintain membership. We have recently introduced an offer of an additional year at the student rate after completion of study. After two years of non-payment, names will be removed from the database. The total number of members currently listed on database is therefore 735.

Of the 422 fully paid-up ‘active’ members, there are 177 full members, 163 online Members, 40 students, 17 TAAF awardees, and 25 institutional members.

Some 124 members are currently registered for Gift Aid, enabling TAA to collect an additional 25p for every £1 of their membership fees from HMRC. This raises valuable funds, which contribute to the TAAF awards. We aim to encourage this further in the coming year.

Selecting suitable photos that match the varied topics covered has been difficult. We need more photos that portray the activities of the TAA (at events and in the field). We also need more photos that illustrate agriculture (in its widest sense, including arable farming, livestock, forestry, research, training etc), especially in tropical semi-arid and arid zones. We ask members to please send us quality photos that we can incorporate in the website. Please send to webmanager@taa.org.uk by the end of 2017. Relevance and quality are critical, preferably with 1.00 to 2.00 MB size.

We are also still seeking more members to volunteer to review and edit the new pages as they develop. Again, please contact the Web Manager. This is your website, so we need it to reflect your needs.

Keith Virgo
Web Manager ([webmanager@taa.org.uk](mailto:webmanager@taa.org.uk))
Why not introduce a new member to TAA? All you need to do is send a name and email address to membership_secretary@taa.org.uk and Linda will do the rest.

On a sadder note, we are sorry to report the passing of the following TAA members in the year 2016-17: D J Parsons, Paul W P Davies, Ronald E Watts, W W Mckinlay, Sanjeev Vasudev, T R Machen, J R Goldsack, L J Collings-Wells, Ian Robinson, Roger Tayler, and Roy Law.

Linda Blunt
TAA Membership Secretary

Publications and Communications Committee Update

Ag4Dev32, a Special Issue on Women in Agriculture

We are very grateful to the guest editors, Christine Okali and Imogen Bellwood-Howard, for their outstanding efforts in compiling this special issue on Women in Agriculture: negotiating and networking. They have managed to persuade a number of internationally-acknowledged experts, from around the world, to contribute to this special issue.

Their articles, based on research, development projects, and other activities in Latin America, Africa and Asia, illuminate a number of important themes that run throughout the journal – women’s participation in agriculture and agricultural development; how women’s access to land, water, labour, technology, and credit, is negotiated, and for what purpose; mainstreaming gender in education, research, policy and project design; power relations between men and women, and among social groups; how households, families and communities operate; women’s empowerment; and gender equity.

The many case studies that illustrate the articles are full of nuances and subtleties, and it seems that nothing is as simple as it first appears. As managers, researchers and advisers dealing with agricultural and natural resources, such insights are invaluable, and must surely enable us to undertake our own work more sensitively, better informed, and thus more successfully.

In fact, the guest editors were so successful in commissioning material that several regular features not related to the theme have had to be omitted – but they will return with the next issue of the journal. Similarly, several items relevant to the theme have had to be held back until the next issue due to a lack of space. We thank all those who contributed material for this special issue.

Ag4Dev33, an Open Issue

Ag4Dev33, the Spring 2018 issue of the journal, will be an open issue with no specific theme. This issue is already almost full, but we would still welcome contributions, particularly News from the Field, book reviews, letters and opinions.

Ag4Dev34, a Special Issue on Controlled Environment Agriculture

The Summer 2018 issue of the journal will be a special issue on controlled environment agriculture, guest edited by Ralph von Kaufmann. This cutting edge technology will make significant contributions to food security, particularly in urban centres and desert environments in the developing world. Contributions for this special issue are invited – please contact the Coordinating Editor (paulag4dev@gmail.com).

Paul Harding
Coordinating Editor, Ag4Dev

TAAF News

MSc awards 2016/17

Fifteen MSc students who received TAAF awards in April 2016 have completed their field research and are in the process of writing their reports. One awardee from April 2016, Nathalie Willmott, completed her degree part-time over a two year period, and presented her dissertation in September 2017. The summary of her research report focusses on woman’s participation in decision-making, and is particularly relevant to the theme of this issue of the journal. It is included below. Summaries of the other research reports will appear in later issues of the journal.

TAAF Funding

Some £14,500 was spent on TAAF awards in the last financial year, out of a budget of £15,000. A total of £3,250 has been received from anonymous donors in the current financial year, together with £1,587 as Gift Aid from earlier donations. This brings the total funds available for TAAF to over £30,000. While this is sufficient for two years of awards at current levels of expenditure, future funding is as ever uncertain so additional contributions from members will always be welcomed and will be put to good use.
Early Career Network

A recent TAA initiative, led by a past TAAF awardee Alex Tasker, is continuing the effort to engage and retain younger members of the TAA at an early stage in their careers. The aim is to link young members to a professional institution which is an active institutional member of TAA, and to ensure that both parties derive tangible value from the relationship. This could take the form of practical training sessions on research methods, policy issues and publishing approaches; networking opportunities linking researchers to collaborating institutions; and mentoring to explore early career trajectories and employment opportunities. Two or three collaborating institutions have been selected as case studies, and participants are currently being identified for a pilot project.

TAAF and the future of the TAA

The opinion survey currently being conducted as part of the TAA’s strategic review will, it is hoped, identify further ways in which the TAA can become more attractive to younger members, including the part that TAAF can play in ensuring success in this critical endeavour.

Antony Ellman
TAAF Chairman

Women’s leadership in the Mekong Delta, Cambodia: how is women’s leadership and participation in water governance changing in the face of new pressures over natural resource use?

As part of my MSc in Anthropology, Environment and Development at University College London, I was funded by the TAA to undertake a ten-week data collection trip to Cambodia in April, May and June 2017. The aim was to research women’s leadership and participation in water governance in two provinces in the Mekong Delta – Kratie and Stung Treng, in north-east Cambodia – in the face of new pressures over natural resource use.

Farming communities dependent on aquatic resources in the Mekong Delta face major changes in resource availability, due to climate change, population increase, pollution, and construction of hydropower dams (which result in flooding of villages and agricultural land, Figure 1). Environmental planning and management systems are highly centralised in Cambodia, where construction of hydropower dams is executed by high-level actors with little involvement of communities in decision-making processes. Cultural norms and gender roles further restrict inclusion and participation of women. Views of those at the bottom are inadequately represented, resulting in negative consequences for environmental sustainability, livelihoods, and equity for river-dependent communities.

Community organisations such as North-eastern Rural Development (NRD), a local NGO project supported by Oxfam, aim to strengthen civil society networks, enhance their advocacy efforts, and help them to influence decision-making. I examined a community radio programme and other projects targeted at enhancing women’s leadership capacities and promoting inclusion and participation in water governance. Women are trained to speak on local radio, to conduct participatory information gathering on issues such as savings groups and livelihood-enhancing activities in their communities, and to enhance their confidence and public speaking skills.

Whilst women are taking on more leadership roles in local spheres, and enjoying increased confidence and empowerment, most projects only reach women who have already experienced a certain level of empowerment. There are limits to the extent that ‘inclusion’ and ‘participation’ of stakeholders can compensate for a centralised resource management system which favours the interests of the state, and restricts meaningful participation to particular stakeholders at a particular level and place.

The experience of designing and implementing a research project, and collecting primary data, was invaluable. I learned how to work effectively with small community-based organisations, came to understand the challenges researchers are likely to face when trying to access rural communities, and gained experience of how to undertake particular research exercises. I also learned the importance of flexibility and adaptability when working in such environments and with small community-based organisations.

The findings of the research complemented NRD’s own evaluation data, and Oxfam were pleased to hear certain conclusions drawn by an independent third party. NRD are able to use the findings to inform and improve future programmes, which could increase the effectiveness of interventions, benefiting communities living in the Delta.

The opportunity to practise project planning, data collection and analysis has been invaluable for developing research skills and learning how to work with local community-based organisations, as well as being a fascinating experience overall. Having completed the project, I was able to demonstrate during a recent job interview that I had experience in data collection, project management, and an understanding of poverty, empowerment and development. This enabled me to land an exciting job in Programme Development with another NGO, for which my research in Cambodia prepared me well. I am enormously grateful to TAAF for the financial and professional support which helped me to achieve this goal.

Nathalie Willmott
John Redman Goldsack OBE
1932-2017

John Goldsack, who was one-time Deputy Chief Natural Resources Adviser in ODA (DFID) and the UK’s Permanent Representative to FAO, died on 12 May 2017.

During his career in Kenya, and with ODA, John saw huge changes in the structure and practice of agriculture and international development. He played a key role in the transformation of agriculture and land reform in Kenya, before and after independence, and subsequently in the development of the cadre of agricultural advisers in ODA.

One former colleague wrote: “We first met in March 1963, when John was in a Kenya delegation to the Colonial Office led by Bruce MacKenzie, the Minister of Agriculture, (also included Dermott Kydd, the Senior Land Valuer) to discuss the progress of the Land Transfer Programme and the start of the second year of the Mixed Farms ‘Million Acre Scheme’. John had been a leading light in the setting-up and operation of the scheme, which involved using the farms for high density settlement. The scheme was due to run for five years, at a cost of £19 million – which seemed a huge sum in those days. Farm purchase was on a ‘willing buyer/willing seller’ basis (fortunately there had been a valuation exercise in 1959 which the valuers were able to use) and no element of compensation was involved. The scheme ran on for a number of years after Kenya’s independence, beyond its due closure date.”

Subsequent evaluations have rated this scheme as one of the most successful land transfer schemes in independent Africa countries.

John will be remembered by his friends and colleagues for his extensive knowledge and understanding of the challenges and opportunities facing smallholder agriculture across Africa and elsewhere, his sound advice on technical issues and dry sense of humour.

Another colleague remembers: “John displayed a highly professional approach and a ready ability to establish a rapport with the members of both the (Development) Division and of our client governments. John was a talented sportsman and a particularly good tennis player. John was kind, thoughtful, talented and friendly.”

John’s advice was not restricted to professional issues (in Gambia):

“John invited me and my girlfriend to dinner. I gladly accepted. Then he added that, if we were engaged by the time we arrived, he would pay for the dinner since HM G wasn’t going to get much out of me unless the matter was settled. We were engaged two days later, John did pay for dinner, and Ali and I are looking forward to our 33rd anniversary later this year!”

John grew up in Sutton, Surrey, and studied agriculture at Wye College and Cambridge, and tropical agriculture at the Imperial College of Tropical Agriculture (later the University of the West Indies) in Trinidad, before being posted to Kenya as a member of HM Overseas Civil Service.

In 1956, he was appointed as an Agricultural Officer in Nakuru and the Rift Valley during the Mau Mau Emergency, before moving to be an Agricultural Adviser with the Land Settlement Board, as Kenya moved towards independence in 1964. He played a major role in the development of Kenyan soil conservation and mechanisation programmes and in the Million Acre Scheme that settled thousands of smallholder farmers on land that had been large-scale farms.

In 1970, John and his family left Kenya to take up an appointment in the Ministry of Overseas Development as Assistant Agricultural Adviser and Assistant to the Chief Natural Resources Adviser – Ralph Melville – with specific responsibility for agricultural technical assistance programmes to the Caribbean.

Between 1974 and 1984, he was the Senior Agricultural Adviser in ODA’s Development Divisions in Southern Africa (Lilongwe), the Middle East (Amman), and East Africa (Nairobi); before returning to London to cover programmes in West and North Africa and subsequently India, the Falkland Islands and St Helena.

In 1985, he was appointed as the Deputy Chief Natural Resources Adviser and Principal Agricultural Adviser responsible for agricultural and natural resources advice on multilateral aid programmes including FAO, the World Bank and the European Community; and the beginning of ODA’s programmes in Eastern Europe.

Between 1988 and 1993, John moved to Rome as Minister and the UK’s Permanent Representative to the FAO, and the other Rome-based organisations; where he quickly mastered the challenges presented by FAO and driving in Rome.

I am grateful to John for his advice and support over many years, and I will remember many constructive and enjoyable evenings spent with John in Rome preparing for meetings with FAO over a glass of wine and simple Italian food.

John retired to rural life in Dorset, as part-time game-keeper and dog-breeder, and with time to enjoy watching cricket as a member of the MCC.

Condolences go to his wife, Madeleine, daughter, Margaret and sons, Mark and Robert.

Andrew Bennett
**Professor Mike Mortimore**

1937-2017

Mike was a dedicated member of the TAA right up until his death. Born in 1937 in Bermuda, he was educated on Ascension Island, and then at Monkton Combe School near Bath, before taking a BA (Hons) in Geography at the University of Leeds. He then spent many years in Nigeria, where he researched, edited the journal *Savanna*, and lectured at Ahmadu Bello University in Zaria (1962-79) where I first came across him in the mid-1970s. His specialties were dryland farming systems and strategies for sustainable environmental management. He was also a supporter of the mission work of RURCON (a Pan-African networking team of African Christian Facilitators) among rural communities. From 1979-86, Mike was Professor of Geography at the new Bayero University in Kano, Northern Nigeria.

Back in the UK, Mike and his wife Julia settled in south Somerset, near the Dorset border at Milborne Port. He formed Drylands Research carrying out consultancies widely – including for DFID, NERC, DANIDA and various UN agencies – especially in West Africa, often revisiting Nigeria, where he worked with the Drylands Development Centre in Kano. He maintained academic links as a Senior Research Associate at the Department of Geography, University of Cambridge, and at the Overseas Development Institute in London. Mike was an Honorary Research Fellow at the University of Birmingham, and in Australia, at the University of Melbourne. Famously in 1994, he questioned the notion that “more people must mean more erosion” and proposed the converse, provided that proper signals and support were received by farmers, in whose adaptive abilities he had great confidence.

Mike Mortimore wrote and co-wrote many papers, books and reports, including:


Mike advocated listening to farmers, whom he greatly respected. He believed that, with the right support, farmers will manage improved biodiversity and halt land degradation without expensive, inappropriate interventions. In 2005, Mike was engaged by the UN Convention to Combat Desertification to make this very case to them! In this he was a pioneer, as he was in adapting to climate change. He was awarded in 1999, the *Busk Medal* of The Royal Geographical Society (with the Institute of British Geographers, IBG) and in 2008, the *Netting Award* for contributions to cultural ecology (by the Association of American Geographers). His last address to our South-West TAA Conference was at the Royal Agricultural University, Cirencester, in October 2014, appropriately on ‘Food and Peace – the challenge of the drylands, especially north Nigeria’. Earlier in that same year, he oversaw, with his characteristic courtesy and diligence, a review process as Church Warden of St John the Evangelist at Milborne Port, where we worked together.

We extend sincere condolences to his wife Julia, and their family, in the loss of this dear friend of the TAA, and of dryland communities everywhere.

**John Wibberley**
Upcoming events

**Oxford Farming Conference**

Date: 3rd - 5th January, 2018

Details: An opportunity to hear inspiring and challenging speakers from across the world who have embraced change, with the Sec of State, DEFRA giving the opening address and answering questions. There will also be a focus on changes made possible by embracing IT, taking a more proactive approach to farming with the environment at its heart.

Further information and contact: [https://www.ofc.org.uk/](https://www.ofc.org.uk/)  
Julie Archer, OFC Secretariat: secretariat@ofc.org.uk  
Venue: Oxford University, UK

**TAAG South-West Meeting & AGM**

Date: 4th January, 2018

Details: TAA SW annual meeting with presentations and lunch. Details to be advised.

Further information and contact:  
Ray Bartlett ray@bairstowemyzen.co.uk  
Venue: Exeter Golf & Country Club, Topsham Road, Exeter, EX2 7AE

**Development Economics for Non-Economists**

Date: 15th - 19th January, 2018

Details: The course aims to equip non-economists working on issues of international development to engage better with economists and policy-makers on economic matters. Participants will learn how to identify, understand, apply, discuss, and if necessary challenge economics in development.

Further information and contact:  
http://www.ids.ac.uk/events/development-economics-for-noneconomists  
Leah Plati: T: +44 (0)1273 915832  
E: lplati@ids.ac.uk  
Venue: Institute of Development Studies, University of Sussex

**Training on Use of Participatory Action Research**

Date: 22nd – 26th January, 2018

Details: The course is intended to provide participants with the conceptual and practical tools to design and carry out PRA. They will learn about a range of methods and develop a detailed plan that can be put into action on returning home.

Further information and contact:  
http://www.ids.ac.uk/events/using-participatory-action-research-to-improve-development-practice2  
Venue: Institute of Development Studies, University of Sussex

**International Green Week (IGW), Berlin**

Date: 19th - 28th January, 2018

Details: IGW is the origin of the Global Forum for Food and Agriculture and is an event where over 80 international ministries and food producers meet. Renewable resources, organic agriculture and the future of rural development continue to gain importance at the event.

Further information:  
http://www.gruenewoche.de/en/AboutIGWberlin/InternationalGreenWeek/  

**Energy Now Expo**

Date: 7th and 8th February, 2018

Details: The Energy Now Expo is dedicated to the growth of renewable energy within the agricultural and rural communities of the UK. The Expo brings together farmers, landowners and other rural business owners to engage with industry experts on the latest renewable energy opportunities available, together with the best practices in energy generation and efficiency.

Further information:  
http://www.energynowexpo.co.uk/  
Venue: Telford International Centre, Shropshire
**LECTURE: THE PLANT WORLD BEFORE VASCULAR PLANTS**

**Date:** 16th February, 14.00 hrs  
**Details:** Professor Dianne Edwards (Cardiff University) will give a talk on terrestrial vegetation before vascular plants, looking back at a fascinating and fast-evolving time in the Earth’s and life’s history.  
**Further information and contact:** https://paleobotany2018.weebly.com/  
**Venue:** The Sainsbury Laboratory, Cambridge University

**VERTICAL GROWING SYSTEMS**

**Date:** 23rd February, 2018  
**Details:** The TAA East Anglia group has organised a visit to the Aponic Company controlled environment trials at the NIAB centre, Hasse Fen, Soham. This consists of a commercial, vertical, soil-less vegetable growing system and participants will be able to see the systems and discuss their applicability to tropical agriculture and small-scale peri-urban agriculture.  
**Further information and contact:** http://www.aponic.co.uk/news  
To reserve a place, please contact the East Anglia Convenor  
**Venue:** NIAB Field Trials, Hasse Road, Soham, Ely, Cambridgeshire

**CEREALS 2018**

**Dates:** 13th & 14th June, 2018  
**Details:** Join more than 24,000 farmers, agronomists and industry professionals for the arable industry’s leading technical event.  
**Further information and contact:** http://www.cerealsevent.co.uk/welcome  
**Venue:** Chrishall Grange, Duxford, Cambridgeshire

**TROPICAL AGRICULTURAL DEVELOPMENT - THE BASICS**

**Dates:** 23rd - 27th July, 2018  
**Details:** Course participants will gain an introduction to aspects of poverty and community development and an orientation to ECHO. They will also receive instruction on proven agricultural principles/practices and practical techniques, systems and technologies to meet agricultural and nutritional needs of small-scale, impoverished farmers. There will also be time for hands-on work on the farm, visits with staff, and study in the library.

**21ST WORLD CONGRESS OF SOIL SCIENCE (WCSS)**

**Dates:** 12-17 August 2018  
**Details:** The theme will be "Soils to feed and fuel the world". The WCSS is the main event of the International Union of Soil Science. It takes place every four years and is open to all members of the IUSS and other participants.  
**Further information and contact:** http://www.21wcss.org/  
Flavio Camargo - Vice-President fcamargo@ufrgs.br  
**Congress Venue:** Rio Centro Exhibition and Convention Centre, Rio de Janeiro, Brazil. http://www.riocentro.com.br/

**UK DAIRY DAY, 2018**

**Date:** 12th September, 2018  
**Details:** UK Dairy Day brings together all facets of the dairy industry; farmers, students, breeders, geneticists, vets, feed merchants and dairy equipment suppliers – plus professional service providers, charities and colleges.  
**Further information and contact:** http://www.ukdairyday.co.uk/  
**Venue:** The International Centre, Telford, Shropshire, TF3 4JH
This gender and agriculture webinar series is designed to share knowledge and to facilitate critical thinking and discussion. Participants are both CGIAR scientists and partners, as well as other stakeholders interested in gender research in an agricultural-natural resource management context. Webinar objectives are (i) to share knowledge and learning, and (ii) to increase the visibility and impact of CGIAR gender research.

Learn more about the webinar series on the Platform website: [http://www.gender.cgiar.org](http://www.gender.cgiar.org). Recordings of past webinars can also be downloaded from the website, and you can sign up for those planned in 2018 (see below). The webinars are open to everyone!

**Upcoming webinars in 2018**

**January 27:** *More than a seat at the table: strengthening women’s tenure rights and participation in decision-making and benefits*, organised by Esther Mwangi at the CGIAR Research Programme on Forests, Trees and Agroforestry (FTA) and the Center for International Forestry Research (CIFOR).

**February 19:** *Improving gender equity in irrigation: what approaches can improve participation and benefits for women?*, organised by Nicole Lefore at the CGIAR Research Programme on Water, Land and Ecosystems (WLE) and the International Water Management Institute (IWMI).

**March 27:** *Gendered perspectives on agricultural innovations adoption in Egypt*, organised by Dina Najjar at the CGIAR Research Programme on Wheat and the International Center for Agriculture Research in the Dry Areas (ICARDA).
How to become a member of the TAA

If you are reading someone else’s copy of *Agriculture for Development* and would like to join, or would like to encourage or sponsor someone to join, then please visit our website at [http://www.taa.org.uk/](http://www.taa.org.uk/)

**Step One - Application:** Applications can be made on-line at: [http://www.taa.org.uk/membership](http://www.taa.org.uk/membership)
Alternatively an application form can be downloaded, completed and sent to: TAA Membership Secretary, 15 Westbourne Grove, Great Baddow, Chelmsford CM2 9RT.

**Step Two - Membership Type:** Decide on the type of membership you require – see the details and subscription rates below:

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<tr>
<th>Type of membership and annual subscription rate</th>
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<th>£40</th>
<th>£120</th>
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**Step Three - Payment:** Payment details are on the website with ‘Bank Standing Order’ being the preferred method since this ensures annual payment is made and is one less thing to remember!

Payment can also be made by bank transfer, on-line using PayPal, or by cheque. Bank details are available from: treasurer@taa.org.uk

**Step Four - Access to website and Journals:** When application and payment has been received then the Membership Secretary will contact you with your membership number and log-in details for you to fully access the website and journals. The latest journal will be sent to full members.

For membership enquiries contact: membership_secretary@taa.org.uk
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