The project-level Women's Empowerment in Agriculture Index
How we are developing a new index

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CGIAR Collaborative Platform for Gender Research
Annual Scientific Conference
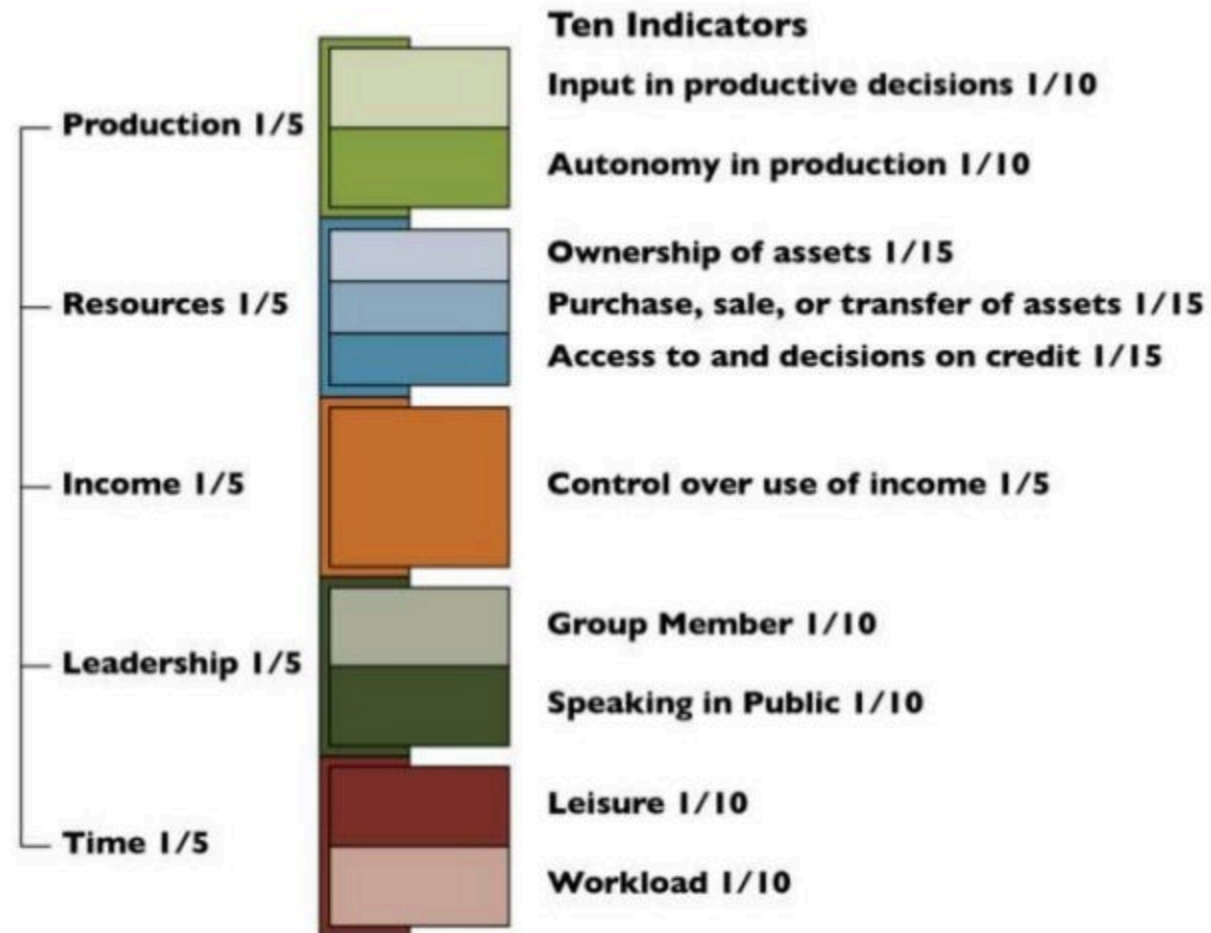Addis Ababa, Ethiopia
September 25, 2018

Starting point:
Women's Empowerment in Agriculture Index (WEAI)

▶ Survey-based index

▶ Developed by IFPRI, USAID, & OPHI

▶ Launched in 2012

▶ Measures inclusion of women in the agricultural sector

How is the index constructed?

▶ An aggregate index in two parts:

- ▶ Five Domains of Empowerment (5DE)
- ▶ Gender Parity Index (GPI)

▶ Constructed using interviews of the **primary male** and **primary female** adults in the same household

Ten Indicators

Production 1/5
- Input in productive decisions 1/10
- Autonomy in production 1/10

Resources 1/5
- Ownership of assets 1/15
- Purchase, sale, or transfer of assets 1/15
- Access to and decisions on credit 1/15

Income 1/5
- Control over use of income 1/5

Leadership 1/5
- Group Member 1/10
- Speaking in Public 1/10

Time 1/5
- Leisure 1/10
- Workload 1/10

GAAP2

50 countries, 75 organizations

GAAP2
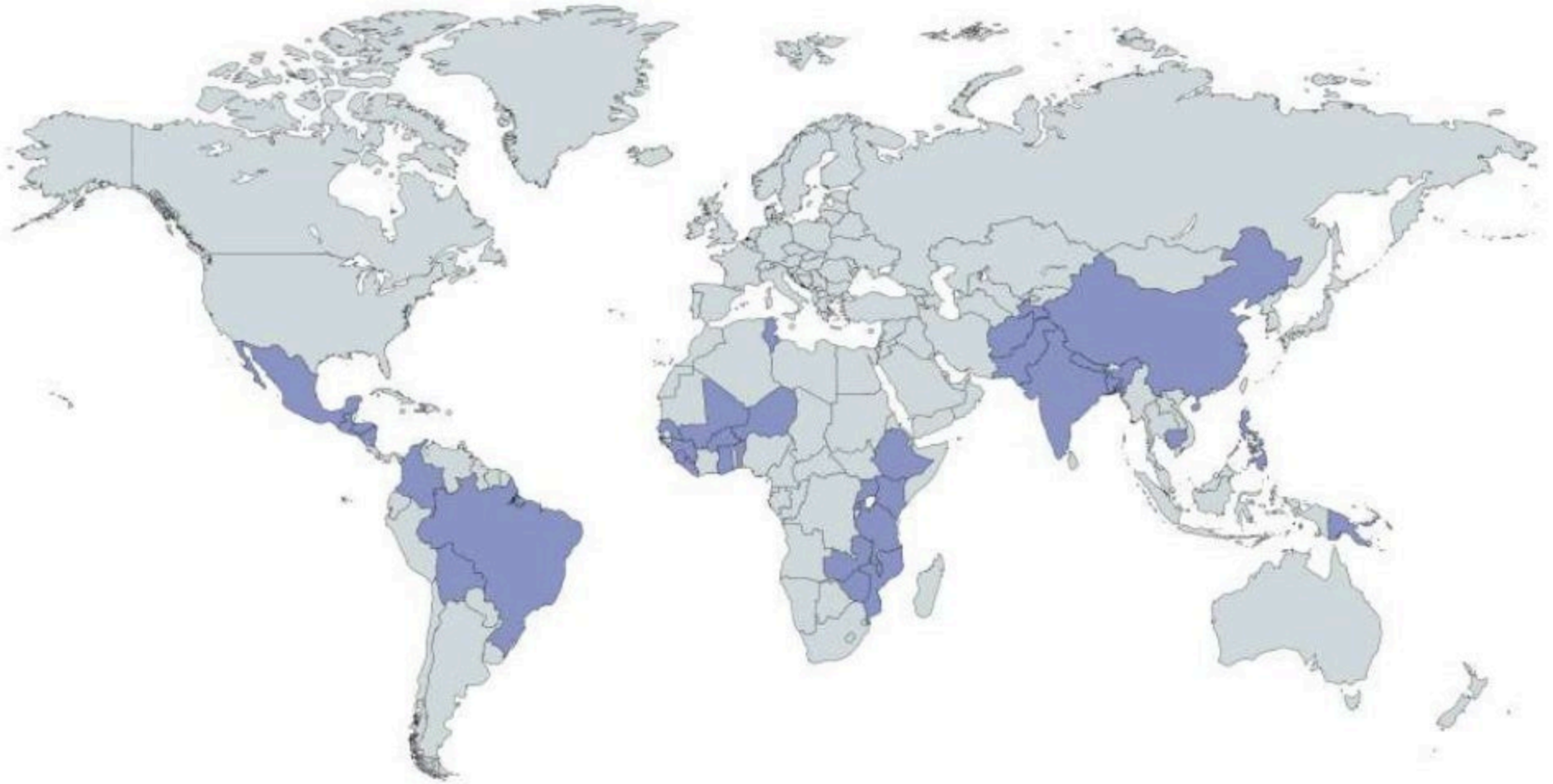
Pro-WEAI

Comparable metrics for empowerment:

Core set of pro-WEAI
empowerment modules
- ▶ Quantitative survey
- ▶ Qualitative protocols

+

Standardized add-ons
depending on project needs
- ▶ Nutrition and health
- ▶ Livestock-enhanced

GAAP2 for pro-WEAI:
A portfolio approach to measuring empowerment

Qualitative

Income from projects

Shorter interview

Mobility

Livestock

Adaptability to context

Domestic violence

Intrahousehold relationships

GAAP2

IDENTIFYING DOMAINS OF EMPOWERMENT

Original WEAI: 5 domains

Production 1/5

Resources 1/5

Income 1/5

Leadership 1/5

Time 1/5

Ten Indicators

Input in productive decisions 1/10

Autonomy in production 1/10

Ownership of assets 1/15

Purchase, sale, or transfer of assets 1/15

Access to and decisions on credit 1/15

Control over use of income 1/5

Group Member 1/10

Speaking in Public 1/10

Leisure 1/10

Workload 1/10
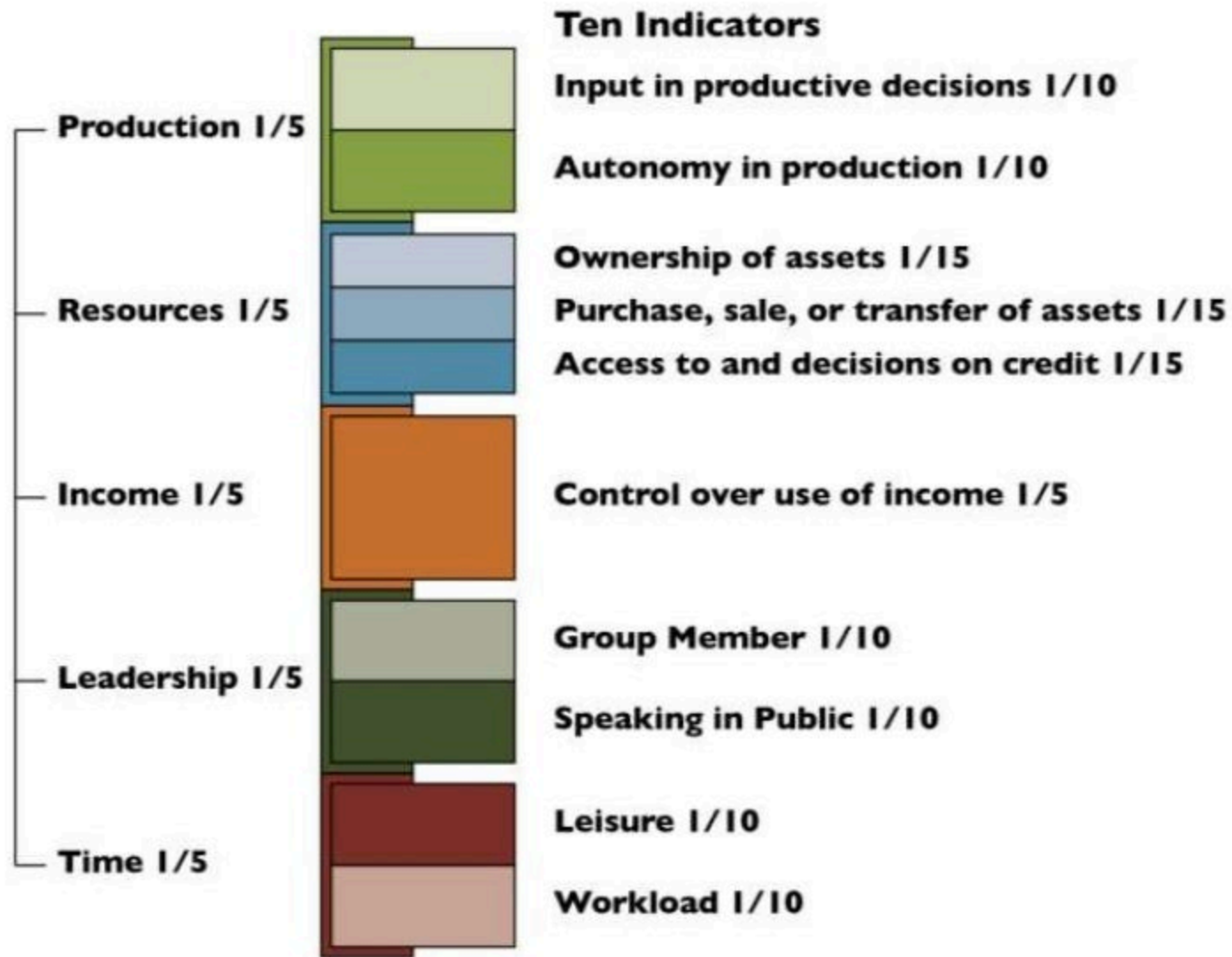
How WE(AI) define empowerment

GAAP2

Three types of agency measured in all versions of the WEAI

Power within (intrinsic agency)

Power to (instrumental agency)

Power with (collective agency)

Three domains of empowerment

Power within
(intrinsic agency)

Power to
(instrumental agency)

Power with
(collective agency)

GAAP2
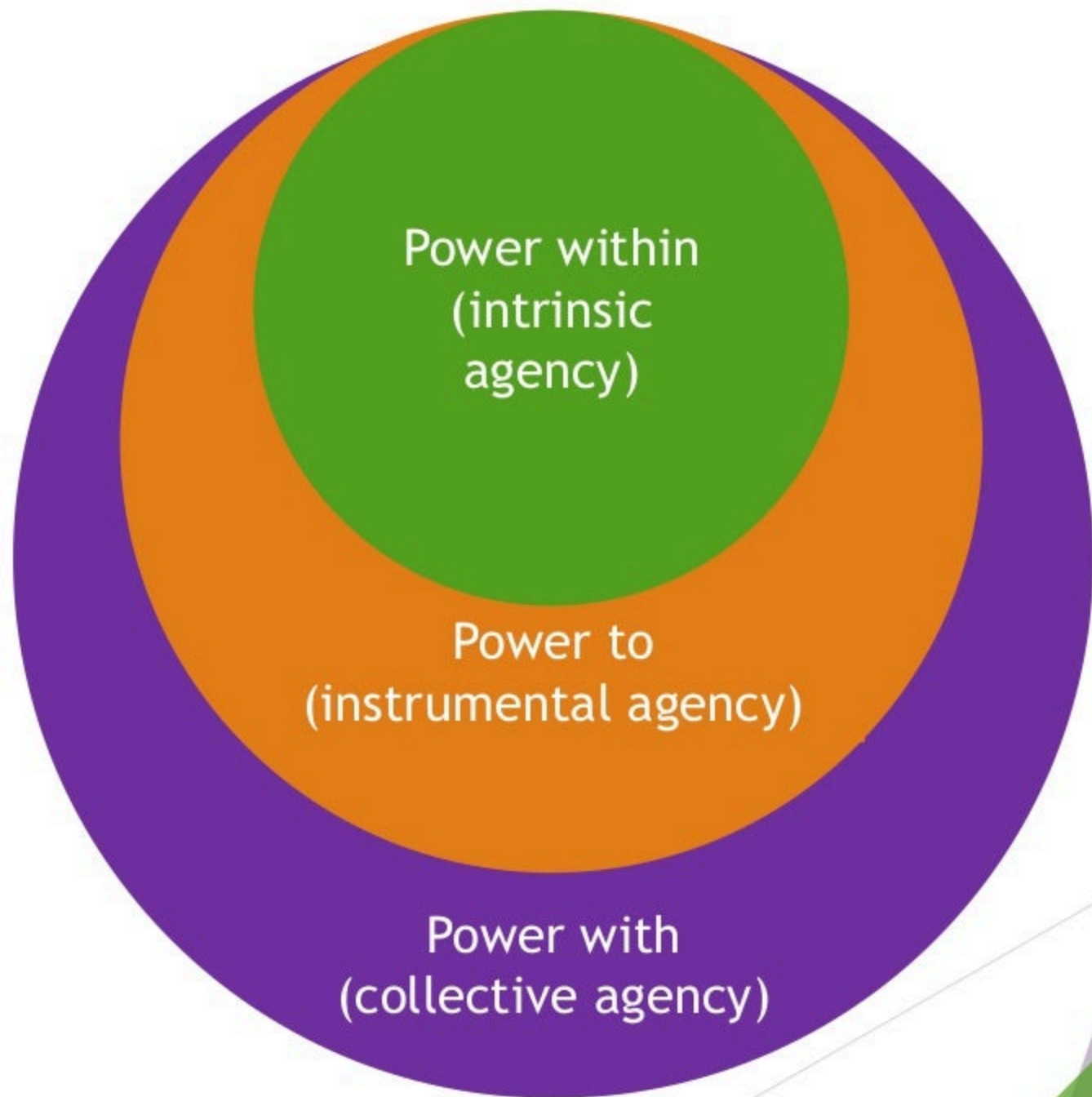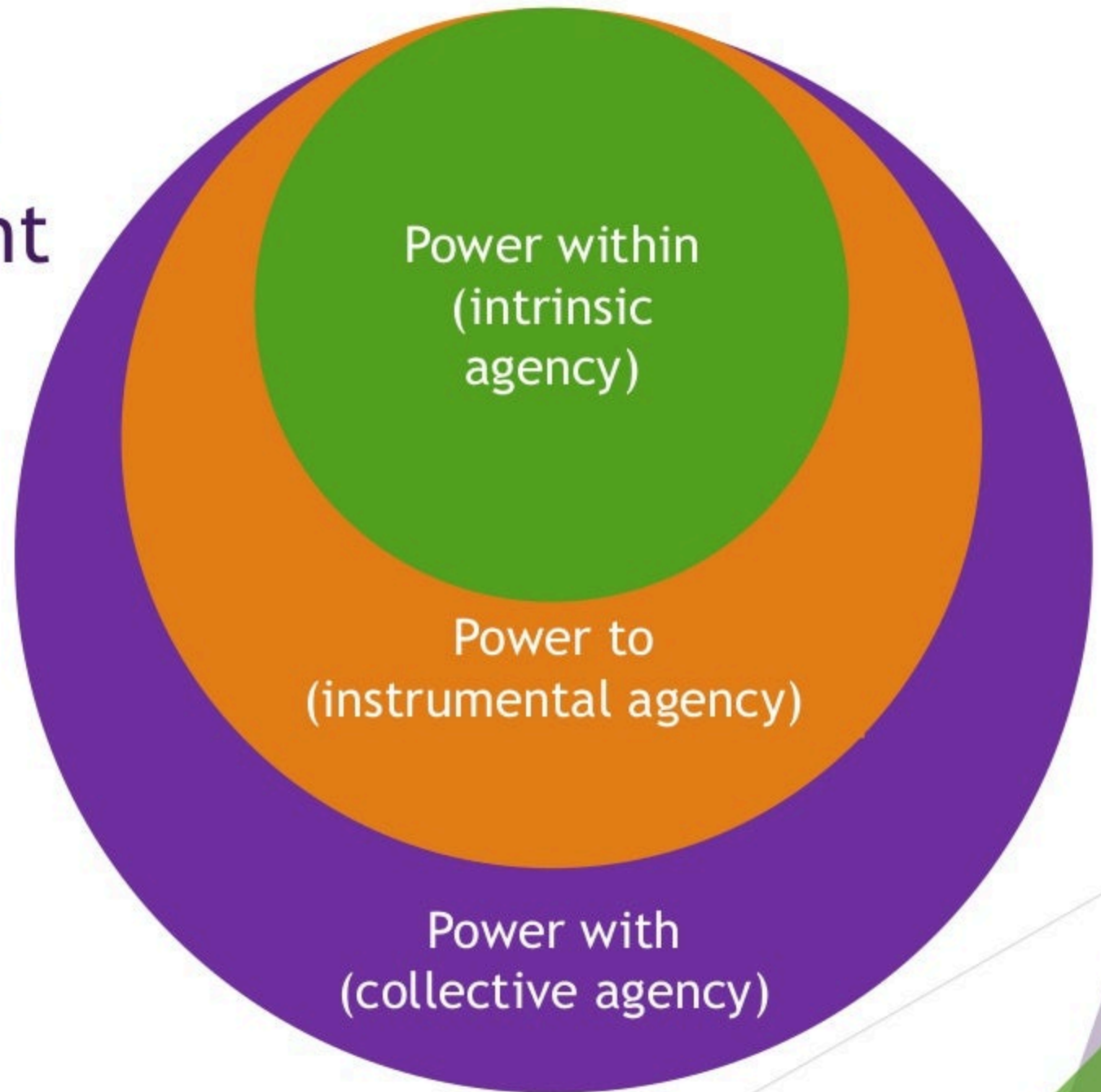
DEVELOPING INDICATORS OF EMPOWERMENT

Original WEAI: 10 indicators

Ten Indicators

Production 1/5
- Input in productive decisions 1/10
- Autonomy in production 1/10

Resources 1/5
- Ownership of assets 1/15
- Purchase, sale, or transfer of assets 1/15
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Leadership 1/5
- Group Member 1/10
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Time 1/5
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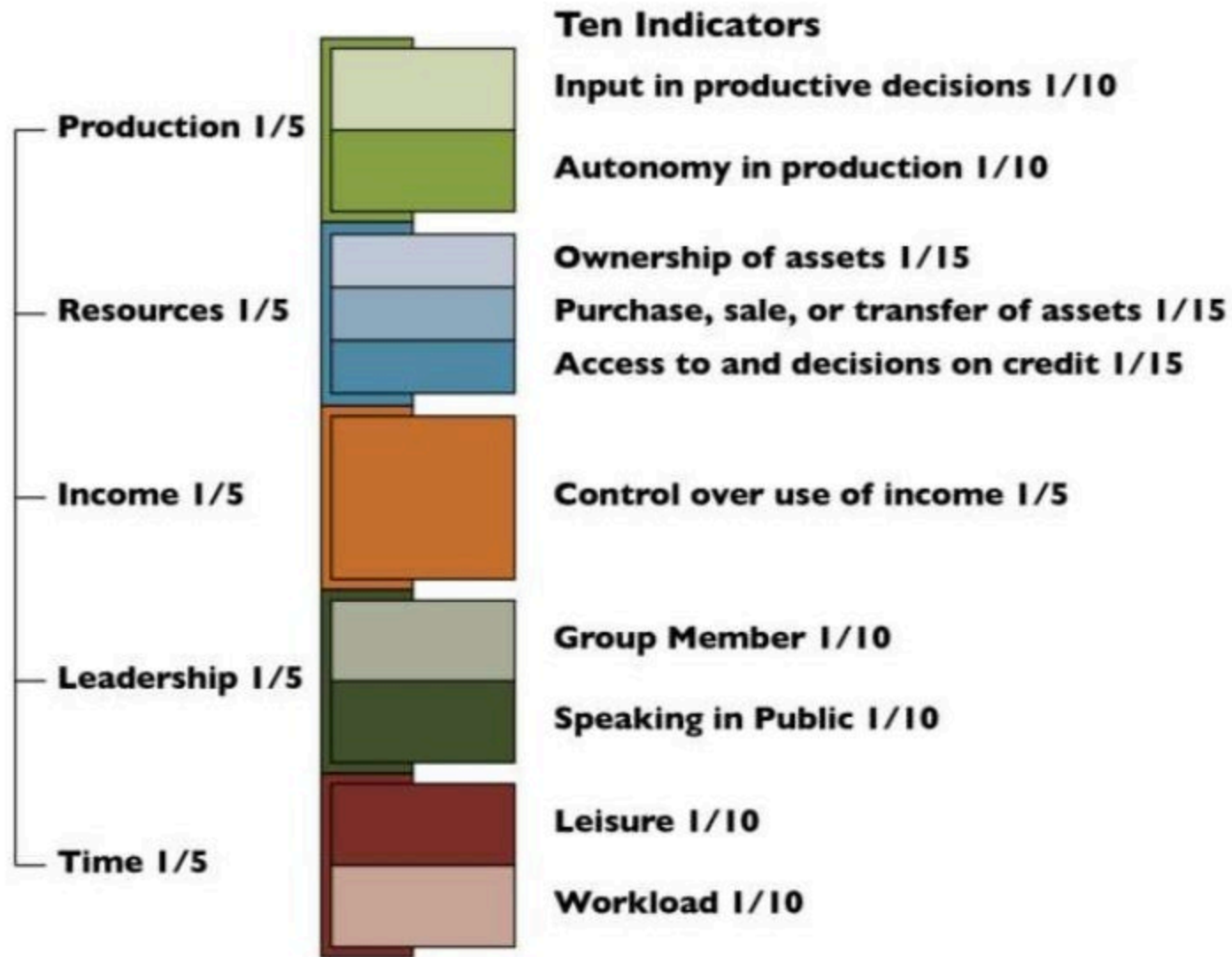
Draft indicators

A-WEAI indicators
Input in productive decisions
Ownership of assets
Access to and decisions on credit
Control over use of income
Group membership
Workload

GAAP2

Draft indicators

A-WEAI indicators	New indicators
Input in productive decisions	Access to information
Ownership of assets	Autonomy in production
Access to and decisions on credit	Autonomy in income
Control over use of income	Decision-making over land
Group membership	Responsibility for repayment
Workload	Access to a financial account
	Input in decisions about outputs
	Input in group decision-making
	Membership in influential groups
	Ability to visit important locations
	Respect among household members
	Attitudes about domestic violence

Pilot data from the GAAP2 projects

Project	Country	# of women	# of men
ANGeL	Bangladesh	3,917	3,606
AVC	Bangladesh	501	499
FAARM	Bangladesh	287	284
Grameen	Burkina Faso	380	380
Heifer	Nepal	879	844
iDE	Ghana	671	442
JP-RWEE	Ethiopia	751	631
SE LEVER	Burkina Faso	1,777	1,565
TRAIN	Bangladesh	5,040	4,783
Trias	Tanzania	790	228
WINGS	India	1,837	1,368
WorldVeg	Mali	714	694
TOTAL		**17,544**	**15,324**

Choosing indicators and assessing indicator thresholds

▶ Compare several potential indicator thresholds using pilot data

▶ Check percentage of missing data for each indicator

▶ Look at correlations and redundancy between indicators

▶ Discuss dilemmas with GAAP2 team, projects, and partners

▶ REPEAT

GAAP2

Ex: Control over use of income

How much decision-making power about income gives someone adequate "control over use of income"?

Should we include control over agricultural outputs?

Ex: Control over use of income

At least some input in decisions	Income (%)	
	Female	Male
Staple grain	82	95
Horticultural/high value crops	78	89
Large livestock	79	92
Small livestock	84	93
Poultry/small animals	87	84
Fishpond	64	89
Non-farm economic activities	88	96
Wage and salary employment	89	99

GAAP2

Ex: Control over use of income

At least some input in decisions	Income (%)		Output (%)	
	Female	Male	Female	Male
Staple grain	82	95	86	98
Horticultural/high value crops	78	89	85	97
Large livestock	79	92	84	95
Small livestock	84	93	87	94
Poultry/small animals	87	84	91	87
Fishpond	64	89	79	97
Non-farm economic activities	88	96	N/A	N/A
Wage and salary employment	89	99	N/A	N/A

GAAP2

Ex: Control over use of income

Potential indicator definitions	% adequate	
	Women	Men
At least some input in decisions about INCOME from at least ONE activity	91	99
At least some input in decisions about INCOME and OUTPUTS from at least ONE activity	91	99

Ex: Control over use of income

Potential indicator definitions	% adequate	
	Women	Men
At least some input in decisions about INCOME from at least ONE activity	91	99
At least some input in decisions about INCOME and OUTPUTS from at least ONE activity	91	99
At least some input in decisions about INCOME from at least TWO activities	72	86
At least some input in decisions about INCOME and OUTPUTS from at least TWO activities	71	86

Ex: Control over use of income

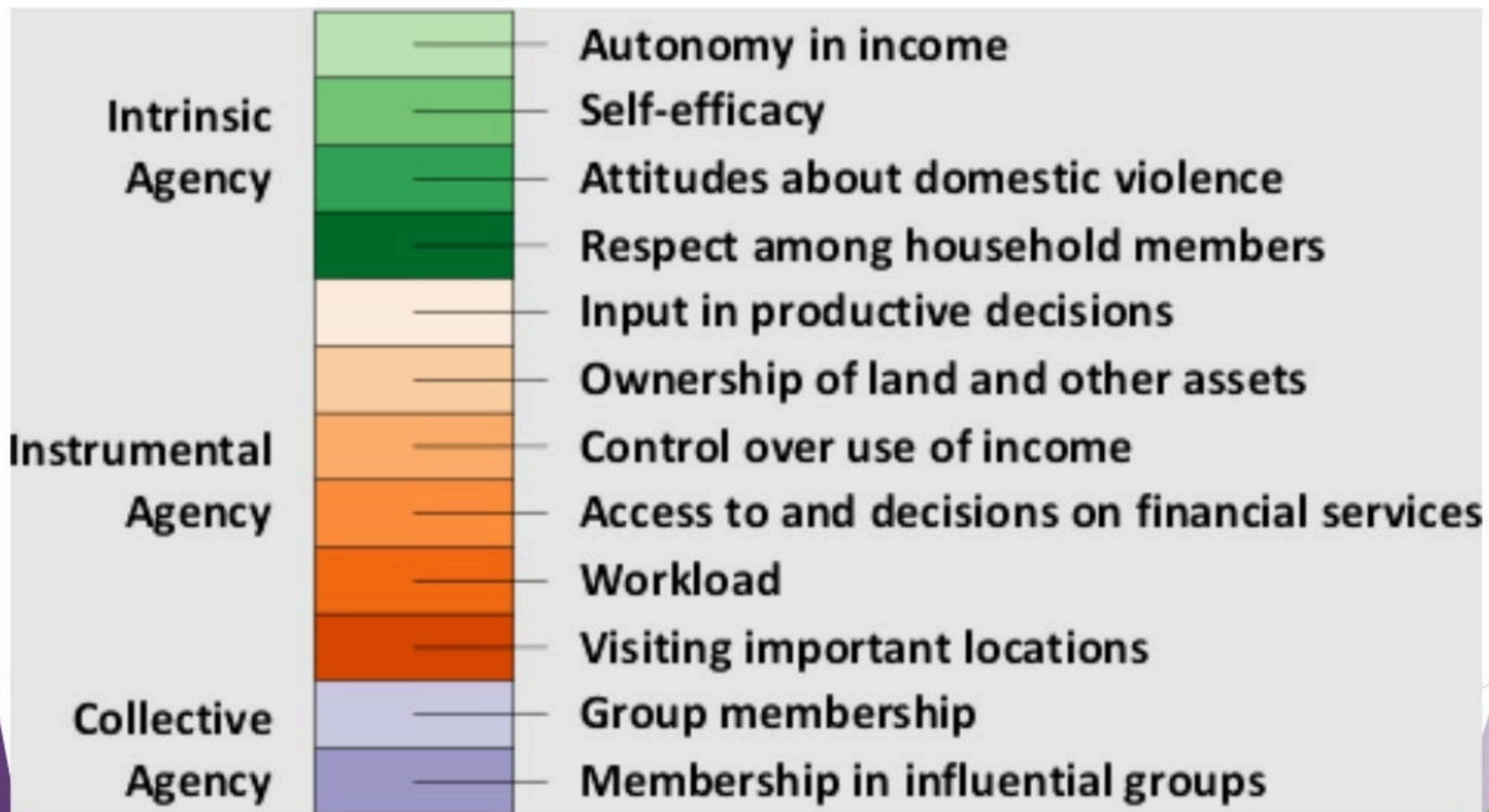| Potential indicator definitions	% adequate	
	Women	Men
At least some input in decisions about INCOME from at least ONE activity	91	99
At least some input in decisions about INCOME and OUTPUTS from at least ONE activity	91	99
At least some input in decisions about INCOME from at least TWO activities	72	86
At least some input in decisions about INCOME and OUTPUTS from at least TWO activities	71	86
At least some input in decisions about income from ALL ACTIVITIES in which they participate	72	82

[Updated] draft indicators

A-WEAI indicators	New indicators
Input in productive decisions	Access to information
Ownership of assets	Autonomy in production
Access to and decisions on credit financial services	Autonomy in income
Control over use of income	Decision-making over land
Group membership	Responsibility for repayment
Workload balance	Access to a financial account
	Input in decisions about outputs
	Input in group decision-making
	Membership in influential groups
	Ability to visit important locations
	Respect among household members
	Attitudes about domestic violence
	Self-efficacy

12 indicators of empowerment

Intrinsic Agency
- Autonomy in income
- Self-efficacy
- Attitudes about domestic violence
- Respect among household members

Instrumental Agency
- Input in productive decisions
- Ownership of land and other assets
- Control over use of income
- Access to and decisions on financial services
- Workload
- Visiting important locations

Collective Agency
- Group membership
- Membership in influential groups

GAAP2

Original WEAI: Equal weights by domain, 80% empowerment cutoff

Ten Indicators

Production 1/5
- Input in productive decisions 1/10
- Autonomy in production 1/10

Resources 1/5
- Ownership of assets 1/15
- Purchase, sale, or transfer of assets 1/15
- Access to and decisions on credit 1/15

Income 1/5
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- Group Member 1/10
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- Workload 1/10

GAAP2
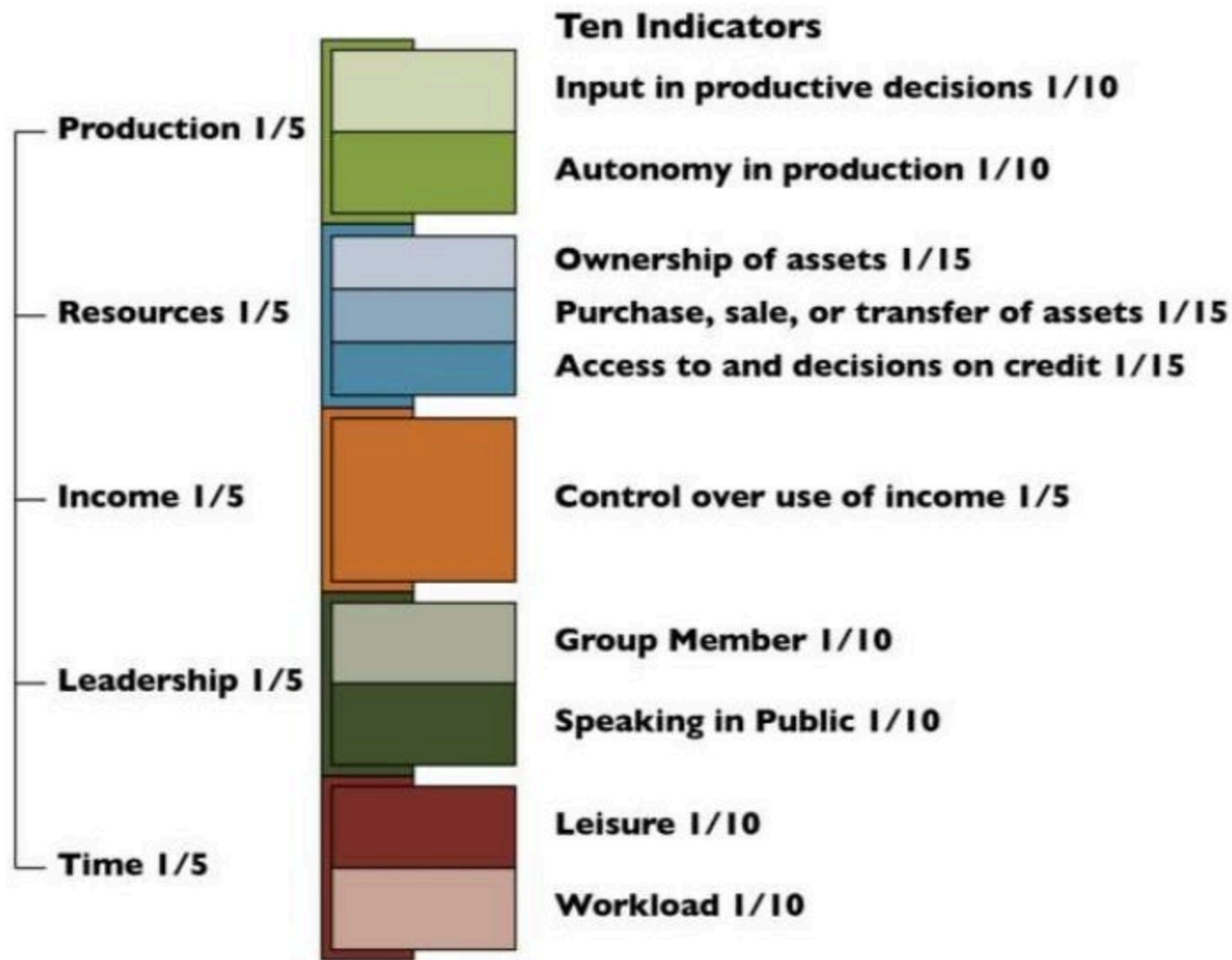
Pro-WEAI: Equal weights (1/12), 75% empowerment cutoff

Intrinsic Agency
- Autonomy in income
- Self-efficacy
- Attitudes about domestic violence
- Respect among household members

Instrumental Agency
- Input in productive decisions
- Ownership of land and other assets
- Control over use of income
- Access to and decisions on financial services
- Workload
- Visiting important locations

Collective Agency
- Group membership
- Membership in influential groups

Rank robustness testing

Project	Three domains of empowerment score (3DE) at each empowerment cutoff					
	75%	70%	65%	60%	55%	50%
WorldVeg/Female	0.50	0.50	0.53	0.53	0.61	0.71
AVC/Female	0.52	0.52	0.56	0.56	0.64	0.71
SE LEVER/Female	0.53	0.53	0.56	0.56	0.64	0.76
TRAIN/Female	0.60	0.60	0.66	0.66	0.73	0.81
ANGeL/Female	0.65	0.65	0.72	0.72	0.80	0.88
AVC/Male	0.70	0.70	0.78	0.78	0.87	0.93
SE LEVER/Male	0.74	0.74	0.82	0.82	0.89	0.95
TRAIN/Male	0.75	0.75	0.84	0.84	0.92	0.97
ANGeL/Male	0.76	0.76	0.85	0.85	0.93	0.97
WorldVeg/Male	0.83	0.83	0.91	0.91	0.97	0.99

Rank robustness testing

Project	Rank of projects' 3DE score at each empowerment cutoff					
	75%	70%	65%	60%	55%	50%
WorldVeg/Female	1	1	1	1	1	1
AVC/Female	2	2	2	2	2	2
SE LEVER/Female	3	3	3	3	3	3
TRAIN/Female	4	4	4	4	4	4
ANGeL/Female	5	5	5	5	5	5
AVC/Male	6	6	6	6	6	6
SE LEVER/Male	7	7	7	7	7	7
TRAIN/Male	8	8	8	8	8	8
ANGeL/Male	9	9	9	9	9	9
WorldVeg/Male	10	10	10	10	10	10

What is next for the index?

IMPROVING THE DRAFT **INDICATORS**

      Cognitive testing

      New Survey items

SHORTENING THE **SURVEY**

      Psychometric analysis

TESTING PRO-WEAI FOR **IMPACT EVALUATION**

Thank you!

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GAAP2 collaborators: International Food Policy Research Institute
Oxford Poverty and Human Development Initiative
13 agricultural development projects in the GAAP2
portfolio

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