

USING WELLBEING CONCEPT TO MEASURE ECONOMIC AND SOCIAL IMPACTS:

A case study of the seaweed processing women's groups in Indonesian
villages

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Indonesia seaweed farming

Gracillaria (*Gracilaria* sp.)

E.Cottonii (*Kappaphycus alvarezii*)

Spinosum (*Eucheuma denticulatum*)

9 MILLION
TONS



~ 70% is exported to China

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Objective:

Analyse the socio-economic benefits for women from community-scale processing of established seaweed species.

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A very common objective:

“Analyse the socio-economic benefits (of an intervention) for women”

And a very common proxy: money \$\$\$\$

-As Δ in income on individual or household level

-As Δ in GDP or sectoral value on national or industry level

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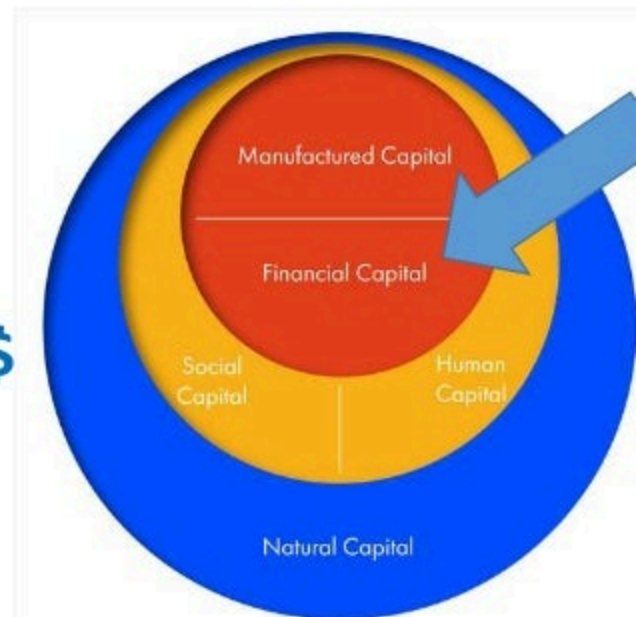
And a very common proxy: money \$\$\$\$

-As Δ in income on individual or household level

-As Δ in GDP or sectoral value on national or industry level

But – a concept of benefit goes well beyond \$\$\$

We might be significantly underreporting the total value



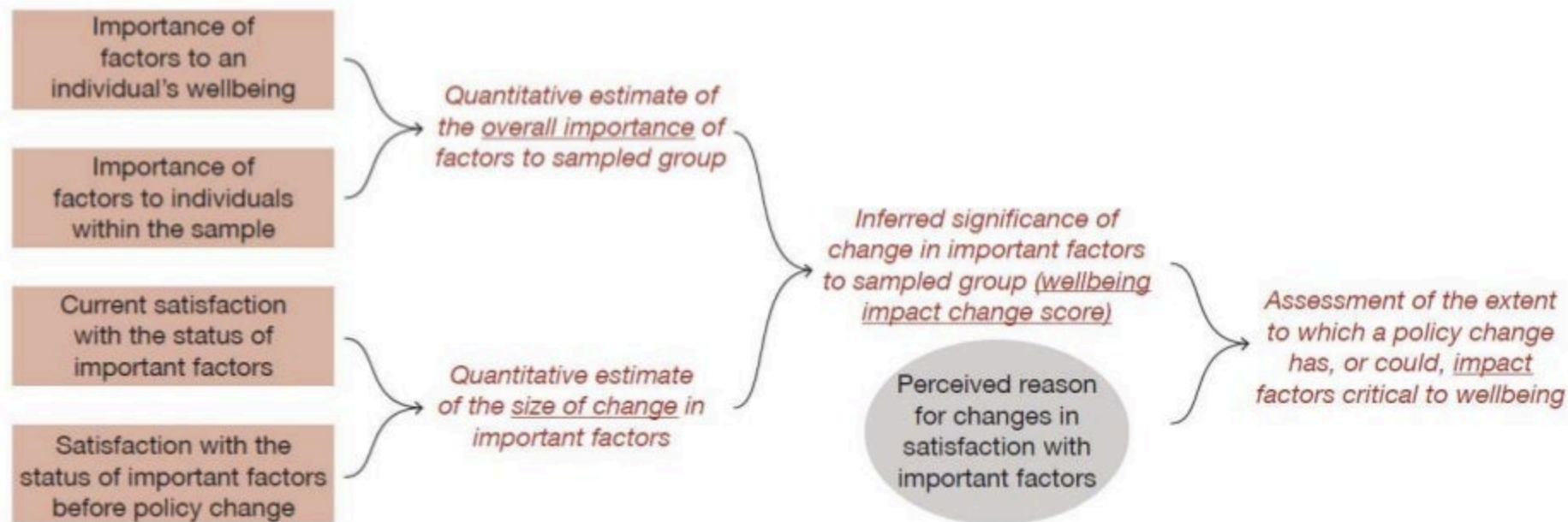
Problems with commonly used evaluation methods:

- (a) measurement of both monetary and non-monetary impacts on equal footing;**
- (b) delimitation,**
- (c) attribution and causality,**
- (d) capturing of both positive and negative changes, and**
- (e) capturing of unintended impacts.**

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Alternative method: Wellbeing impact evaluation W-IE approach



Quantitative data collected for each wellbeing factor (WBF):

$$\begin{aligned} \text{W-IE} &= (\% \text{selecting} * \text{Imp}) * (\text{Sat now} - \text{Sat before}) \\ &= \text{Imp OA} * \Delta \text{Sat} \end{aligned}$$

-Where,

Imp: How important is WBF to women's wellbeing (Likart scale, 0-10)

% selecting: % of total sample selecting that factor

Imp OA: Importance overall, multiplying importance score with % selecting

Sat now and Sat before: satisfaction with the WBF now and before intervention started (Likart scale 0-10)

Δ Sat: Size of change in satisfaction (Sat now – Sat before)

WBI: Wellbeing impact change score

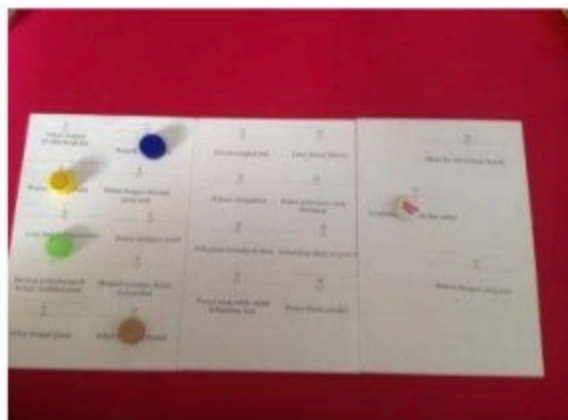
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Wellbeing game:

Total of 21 wellbeing factors

Wellbeing factor (abbreviation for reporting)	Phrase used on cards
1 Having good quality clinics and hospitals close by (clinics)	Dekat dengan PUSKEMAS/RS
2 Having houses that are in good condition (houses)	Rumah yang bagus
3 Having motorised transport (e.g. motorcycle, car) (motorcycle)	Punya Motor/Mobil
4 Having good quality schools close by (schools)	Dekat dengan Sekolah
5 Being able to send the children to highest education level (e.g. at least until bachelor degree) (University)	Anak bisa ke Universitas
6 Social networking (SN)	Punya jaringan social (banyak teman)
7 Sharing experiences and learning new skills (learning)	Berbagi pengalaman & belajar keahlian baru
8 Having good role models in the community (role models)	Menjadi panutan di tengah masyarakat
9 Being close to the market (market)	Dekat dengan pasar
10 Being strong and healthy (health)	Sehat fisik dan mental
11 Being able to go for hajj (hajj)	Bisa berangkat haji
12 Safety: Knowing that the village is a safe place (e.g. not many robberies or violence) (safety)	Desa Aman/Damai
13 Law enforcement: Knowing that people who behave outside	Hukum ditegakkan



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Example of W-IE results – seaweed farming (example of 2 WBF only):

#	Wellbeing factor	% (a)	Imp (b)	Overall Imp (c)=(a.b)	Sat now (d)	Sat before (e)	Sat Change (f) = (d-e)	W-IE (c.f)
10	Health	58	8.99	5.22	8.05	5.95	2.10	10.97
18	Own businesses	35	8.65	3.04	6.78	4.00	2.78	8.45

+ Attribution to the intervention as qualitative explanatory data that can be quantified as % attribution

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Wellbeing Impact Evaluation (W-IE) schematic

impacts of seaweed farming

High Importance	Size of change	W-IE score	Wellbeing affected by farming
Social networks	Very high 3.04	Very high 7.77	(enabler only)
Other needs	Very high 3.05	Very high 6.64	YES
Motorcycle	Very high 3.19	Very high 5.73	YES
Housing	Very high 3.36	High 4.32	YES
Health	Average 1.72	High 3.70	(enabler only)
Basic needs	Very high 3.50	High 3.59	YES

seaweed processing

High Importance	Size of change	W-IE score	Wellbeing affected by processing
Social networks	Very high 3.75	Very high 11.76	YES
Motorcycle	Very high 3.14	Very high 9.94	YES WEAK
Water	Very high 4.05	High 8.76	YES
Market	High 2.69	High 8.61	(enabler only)
Health	High 2.04	Average 6.63	(enabler only)
Sharing	Very high 3.00	Average 6.28	YES

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Method capable of dealing with the 5 major gaps identified in literature:

(a) measurement of both monetary and non-monetary impacts on equal footing – i.e. Motorbikes vs social networks;

NOTE: 'money' was not selected - but 'what money can buy'

(b) delimitation

(c) attribution and causality

(d) unintended impacts

(e) capturing of both positive and negative changes (Sat + or -)

**elicited directly from
beneficiaries / women
(integration?)**

Utility:

- Already tested and working well in wide range of projects/ programs/ interventions

Way forward:

- Further methodological and theoretical 'tweaking'

'Shortcoming': not a generic 'method of mass destruction'

- It is a context specific method, no 'copy and paste', hence,
- It can not be applied by untrained or poorly trained people

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Thank you!

Base reference:

Larson S, Stoeckl N, Jarvis D, Addison J, Prior S and Esparon M (2018)

Using measures of wellbeing for impact evaluation: Proof of concept developed with an Indigenous community undertaking land management programs in northern Australia,

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