

TEEBAgriFood - Lessons Learned and Opportunities for Impact

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TEEBAgriFood - Lessons Learned and Opportunities for Impact

1. How to capture the complexity of food systems?
2. We have to analyse all capitals – produced, natural, social and human
3. Building back better

“Eco-Agri-Food Systems“

- **Diverse AG production systems** (crops & livestock) employing 1.5 bill people
- **Complex biological & climatic feedback loops** at local, regional and global level
- Natural systems overlaid by **social & economic systems** transforming production to food
- Food delivery on **markets (infrastructure & forces), government policies, & corporate** strategies
- Interacting with **consumer & societal preferences**
- **Technologies, info & culture** are cont. re-shaping production, distribution and consumption & the interactions among them

CAPITAL STOCKS AND VALUE FLOWS IN ECO-AGRI-FOOD SYSTEMS

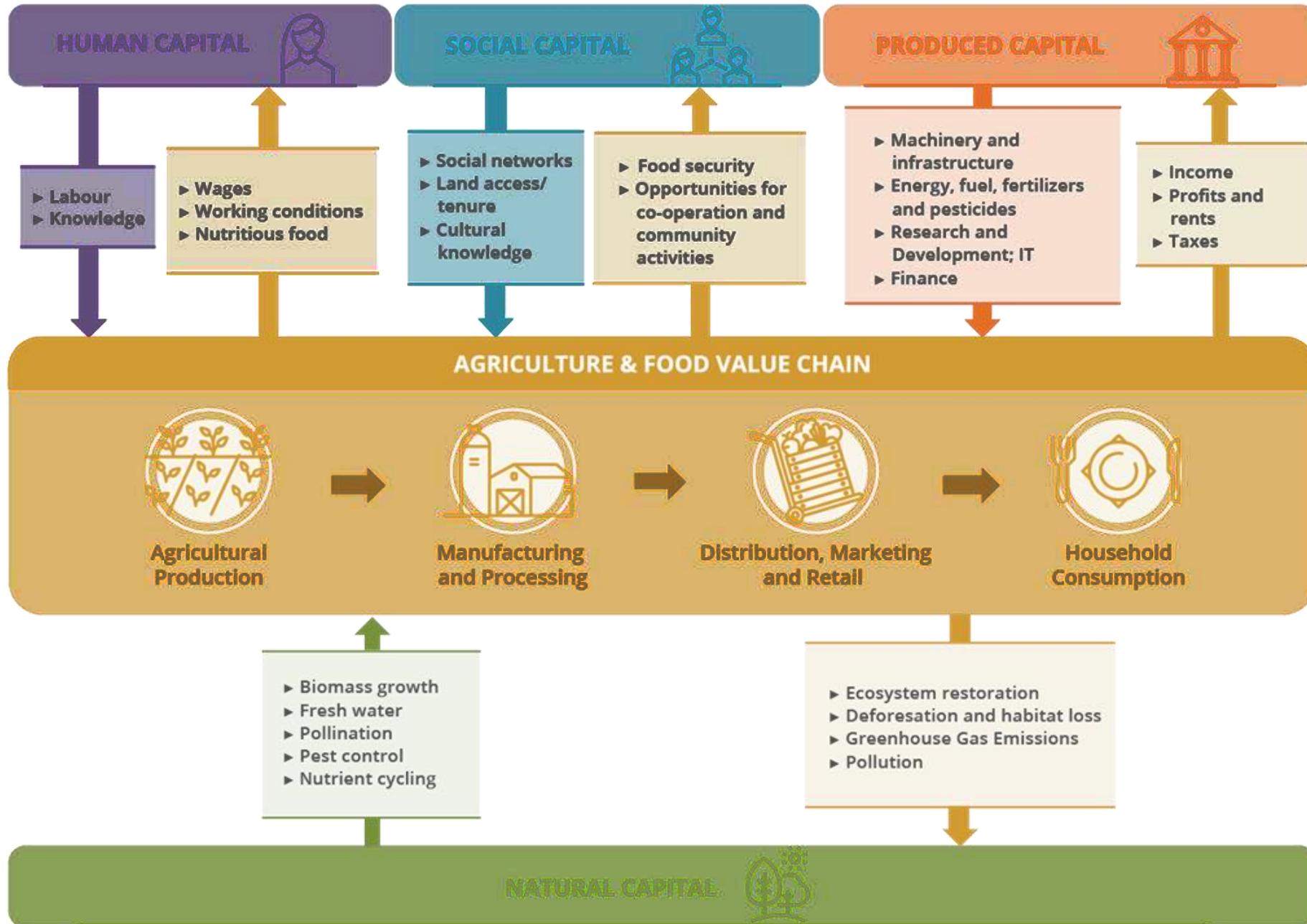


Figure 1.4
Source: authors

LINKS BETWEEN FOUR CAPITALS AND THE ECO-AGRI-FOOD VALUE CHAIN

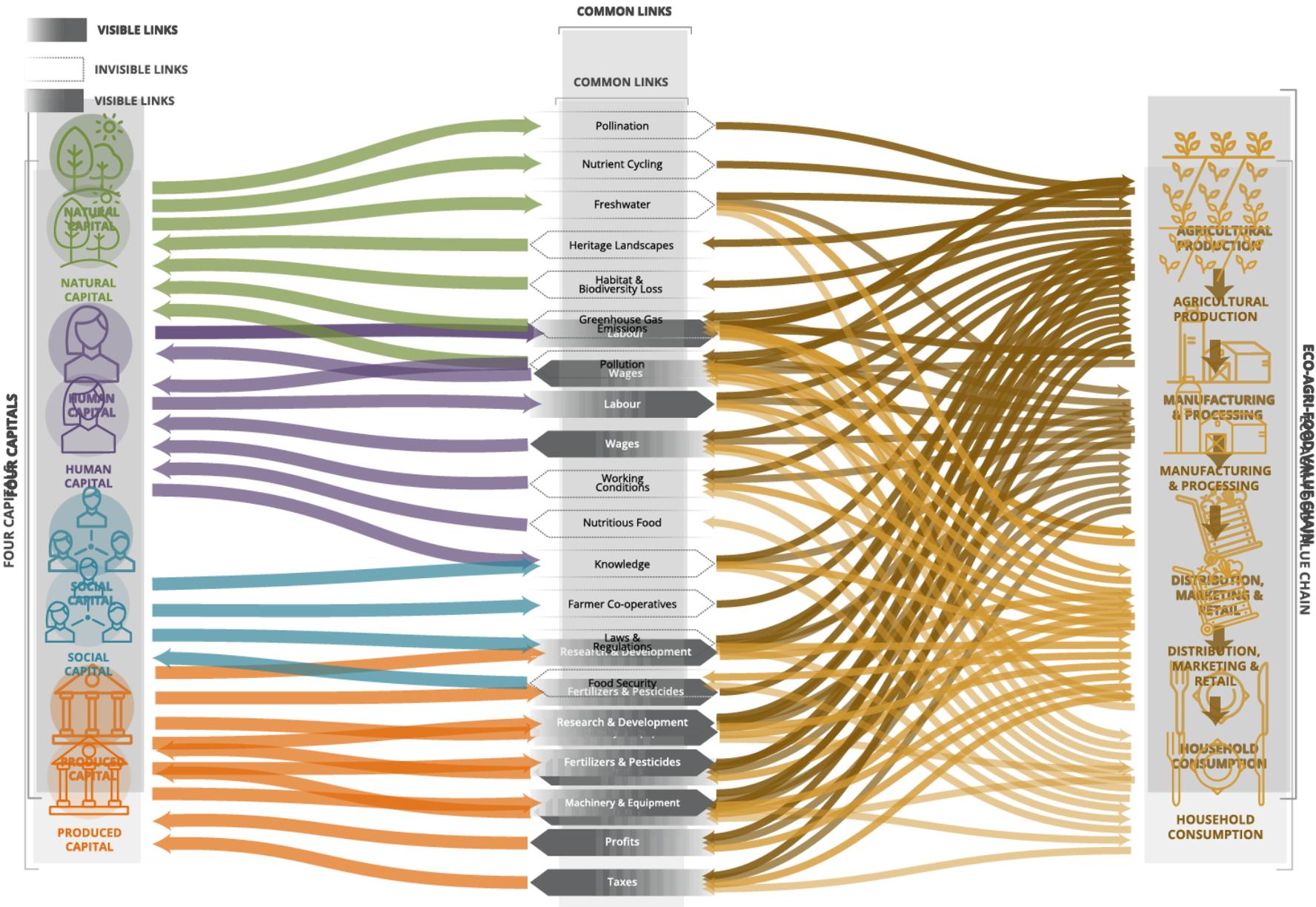


Figure 6.1
Source: authors

Global Value Production

Value of the global economy around \$80 trillion.

FAO estimates the gross value of global **agricultural production** at around **\$5 trillion/a**.

Estimated that the **food system generates** (more than) **twice as much value** as farm production = **10 trillion USD/a**

Example of USA:

For every \$1 spent on food by consumers, a mere 11 cents are accounted by economic activity on farms. The remaining 89 cents are accrued to the activities associated with transforming, delivering preparing the food.

The post-farm to farm ratio of value in the food system is much lower in developing countries

The “**hidden costs**” of global food and land use systems sum to **\$12 trillion**, compared to a market value of the global food system of \$10 trillion.

Hidden Costs

Health Costs: 6.6 trillion

Environment 3.1 trillion

Economic: 2.1 trillion

Hidden costs 12 trillion

Market value: 10 trillion

Net hidden costs. -1.9 trillion

Source: Food and Land Use Coalition, 2019

Consequences if taking externalities into account:

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Töpfer Müller Gaßner

One of the world's biggest food companies had done own internal **audit of the true environmental and social costs** of its business.

The **costs are bigger than profits** and **'trend towards revenue'**. In this year, the company's profits were \$15bn, and its revenue was \$98 bn.

Source: Raj Patel's Aide Memoire from

1st International Dialogue of GAFF, May 2015

Externalities as a problem of the entire food industry

A KPMG report (2012) looking at how much environmental harm was '**externalised**' by industries, calculating the price of damage done but not paid for.

The food industry had the highest costs - **\$200 billion**. And that's **224% of their profits**. The consequences are enormous:

There's no business model where the food industry produces cheap food without destroying the environment.

Reaction to Covid19: Building Back Better?

The fiscal and monetary stimulus to stabilize the economy and secure people's livelihoods so far totals **\$11.7 trillion**, equivalent to 13.9 per cent of global GDP.

Very little fiscal stimulus has targeted the green economy or investment in natural capital.

Building back better means to invest in all four capitals: Produced, Natural, Social and Human

We will only achieve the SDGs and the Paris Climate agreement if we invest in all capitals!