SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK
A GLOBAL INITIATIVE FOR THE UNITED NATIONS

Australia Pacific

The SDGs: Integrating equality and sustainability into food, water and energy for all

Workshop at the 5th ACFID University Network Conference
11:00 am - 12:30 pm, Friday 5 June 2015

MONASH University
Monash Sustainability Institute

UTS:ISF
INSTITUTE FOR SUSTAINABLE FUTURES

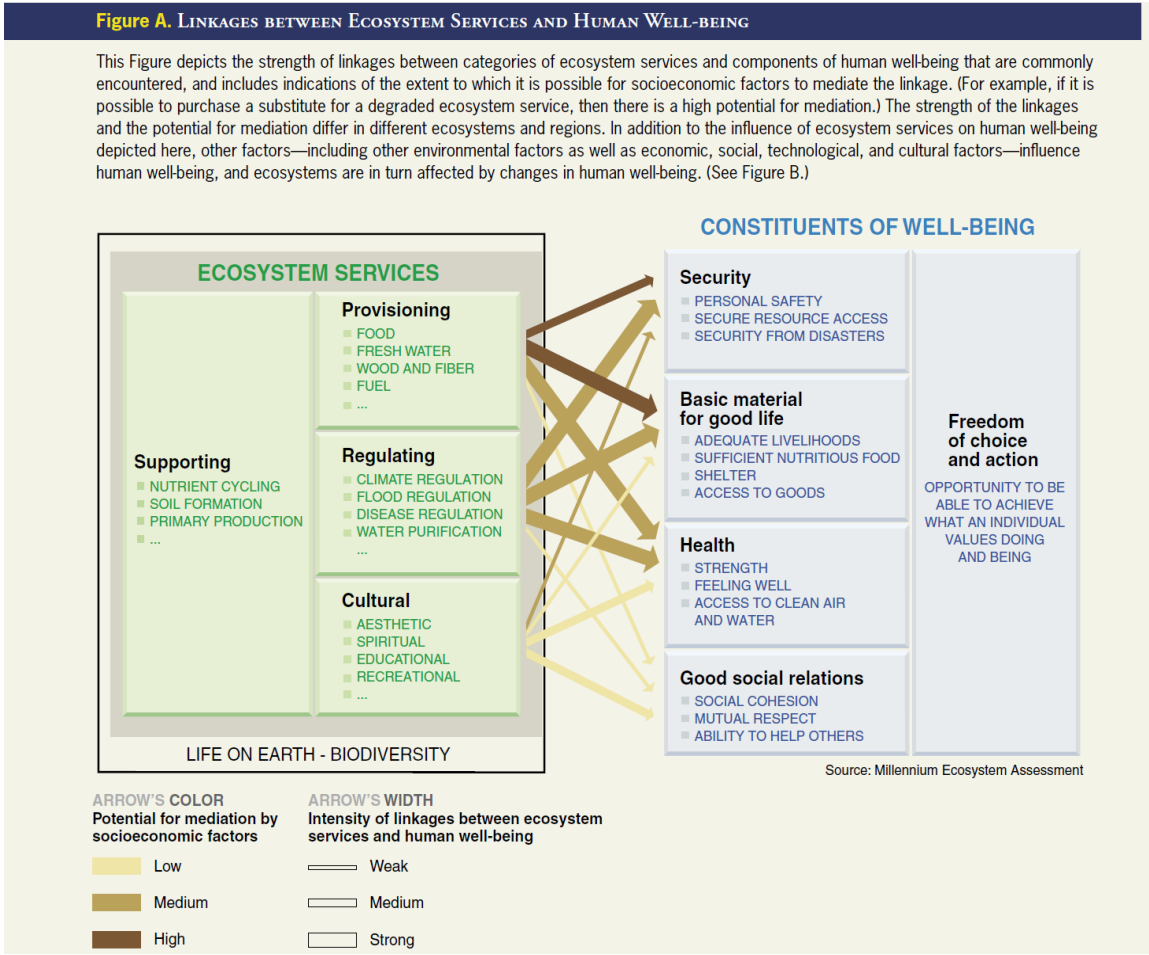
Curtin University
Sustainability Policy Institute

Environment and development must be integrated

- A prerequisite for future human development, including poverty reduction, is the stable functioning of Earth's life support system
- Since 2000, accumulating research shows that this functioning is at risk and that further human pressure may lead to large-scale, abrupt, and potentially irreversible changes
- The new universal SDGS to be approved in September provide a framework for integration

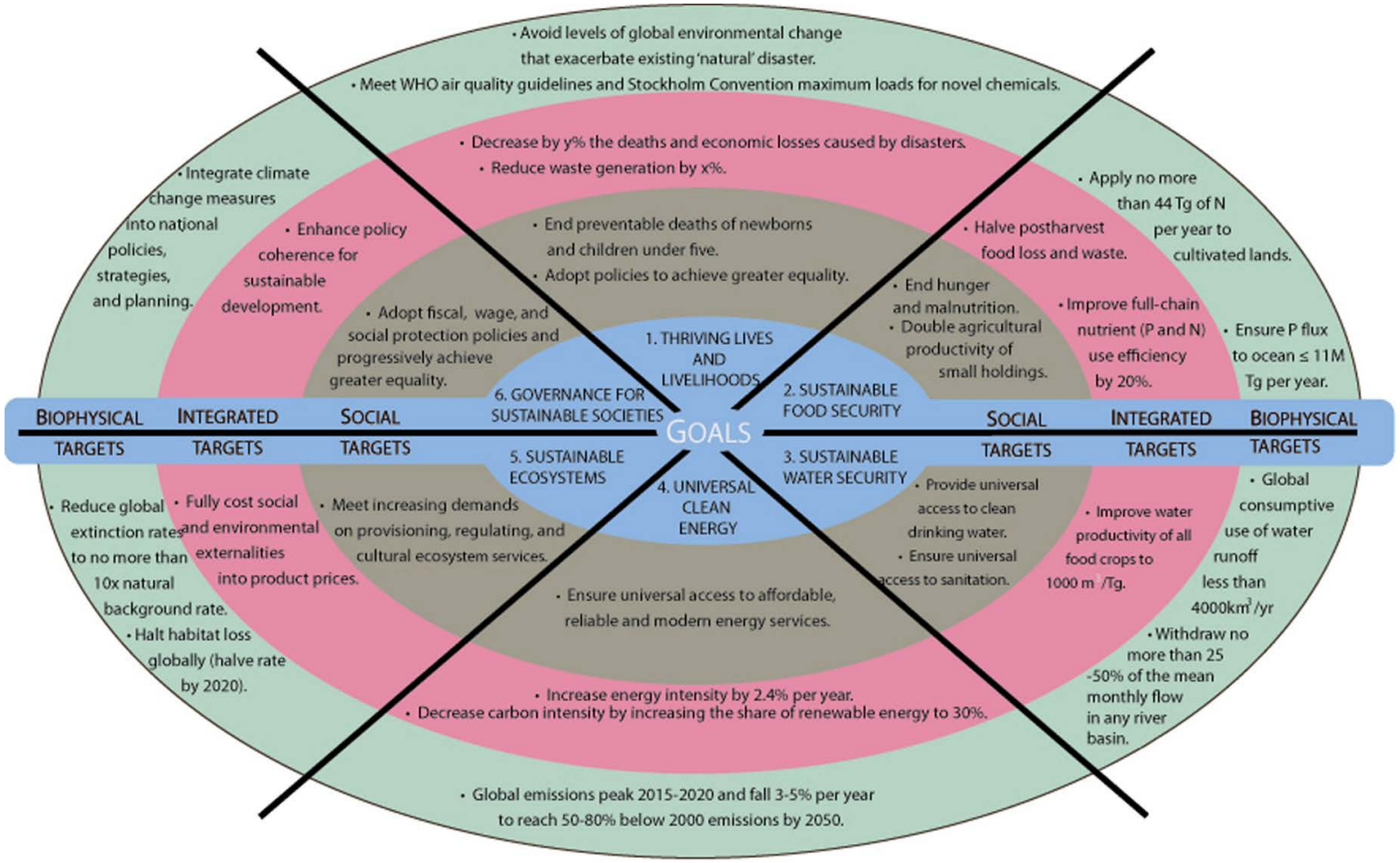
Human wellbeing and ecosystem services

Developing a single, sustainable development agenda is critical. ... Without environmental sustainability, we cannot end poverty; the poor are too deeply affected by natural disasters and too dependent on deteriorating oceans, forests and soils. …
Right now, development, sustainable development and climate change are often seen as separate.
(United Nations, 2013).



United Nations. (2013). *A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development*. New York.

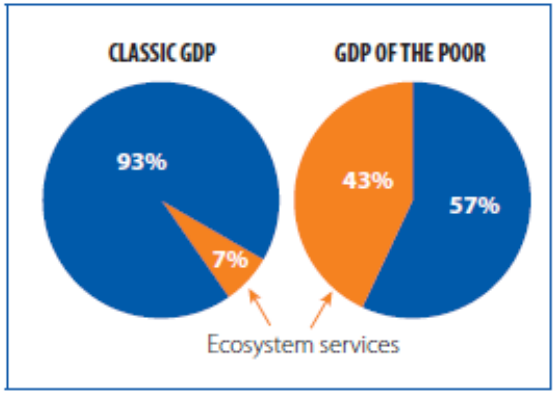
A framework for integrating environment and development



Integrating environment and development for SUSTAINABLE DEVELOPMENT

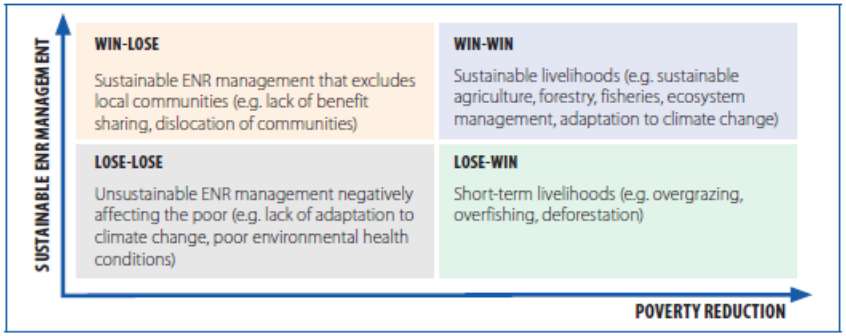
- Poor and vulnerable groups are disproportionally dependent on ecosystem services for their livelihoods, and are most affected by Environmental and Natural Resource degradation and ecological shocks.
- A “GDP of the poor” in India showing the contribution of ecosystem services shows its 6 times greater importance to their livelihoods
- There are positive and negative potential Poverty-Environment linkages

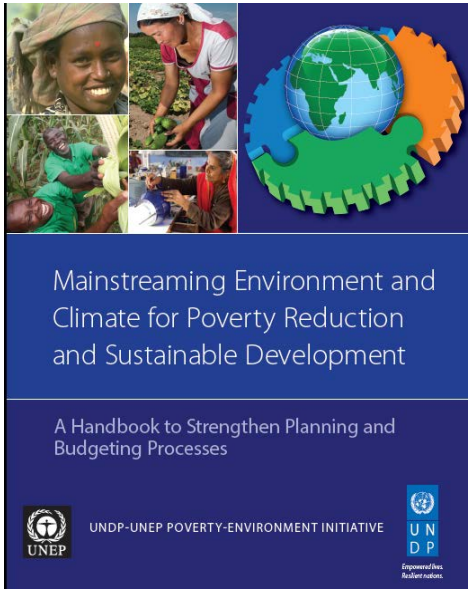
Figure C.2 Ecosystems and Poverty in India



Source: Sukhdev 2009.

Figure 2.3 Examples of Positive and Negative Poverty-Environment Linkages

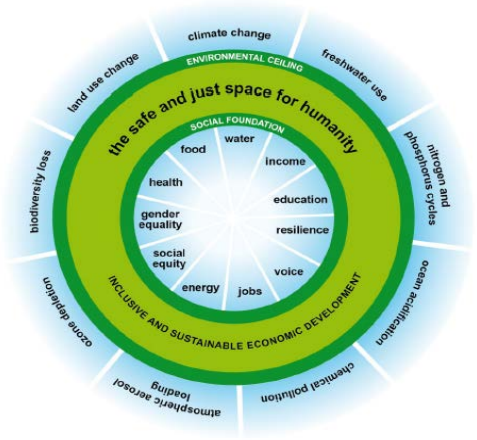




Inequality –Global dynamics in the doughnut

- Oxfam highlighted: “Social and planetary boundaries are interdependent.
- Would eradicating poverty stress planetary boundaries: NO
- Providing the additional calories needed by the 13% facing hunger would require 1% of global food supply
- Energy for 19% lacking electricity would cause <1% increase in global CO2 emissions
- IN CONTRAST
- 50% of global carbon emissions are from 11% of the population
- 33% of world’s sustainable nitrogen budget is used for meat production in the EU with 7% of world’s population.

Figure 1. A safe and just space for humanity to thrive in: a first illustration



Source: Oxfam. The 11 dimensions of the social foundation are illustrative and are based on governments’ priorities for Rio+20. The nine dimensions of the environmental ceiling are based on the planetary boundaries set out by Rockström et al (2009b)


A SAFE AND JUST SPACE FOR HUMANITY

CAN WE LIVE WITHIN THE DOUGHNUT?

Kate Raworth

Oxfam

Humanity’s challenge in the 21st century is to eradicate poverty and achieve prosperity for all within the means of the planet’s limited natural resources. In the run-up to Rio+20, this discussion paper presents a visual framework – shaped like a doughnut – which brings planetary boundaries together with social boundaries, creating a safe and just space between the two, in which humanity can thrive. Moving into this space demands far greater equity – within and between countries – in the use of natural resources, and far greater efficiency in transforming those resources to meet human needs.

Oxfam Discussion Papers

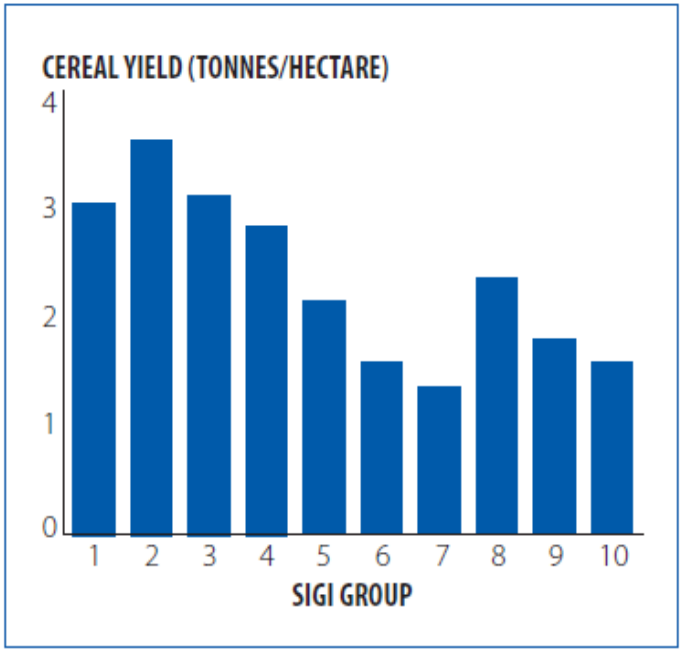
Oxfam Discussion Papers are written to contribute to public debate and to invite feedback on development and humanitarian policy issues. They are ‘work in progress’ documents, and do not necessarily constitute final publications or reflect Oxfam policy positions. The views and recommendations expressed are those of the author and not necessarily those of Oxfam.

www.oxfam.org/grow GROW FOOD, LIFE, PLANET. Oxfam

Inequality –gender perspectives

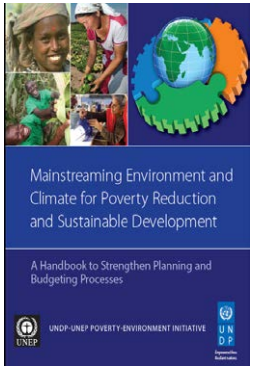
- Women's leadership in environmental and natural resource management is well recognised (United Nations Development Programme 2009)
- Women farmers typically achieve yields 20-30% lower than men. Most studies suggest women would achieve the same yields if they had equal access to productive resources and services
- As in figure 2.2 countries with less gender inequality achieve higher average cereal yields than those with greater inequality.

Figure 2.2 Correlation of Cereal Yield and Gender Inequality



Source: FAO 2011b.

Note: 1 = least gender inequality and 10 = greatest gender inequality as determined by the Social Institutions and Gender Index (SIGI) constructed by the Development Centre of the Organisation for Economic Co-operation and Development.



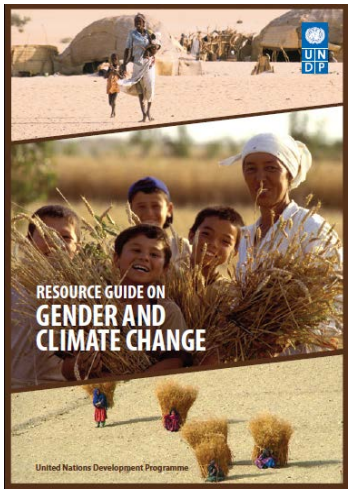
Inequality –gender perspectives

BOX 16	Negative effects of gender inequality and suggestions

1	Managing infrastructure and settlements[114]

2	Managing ecosystems[116]

Measures	Possible negative impacts	Suggestions
Introduce native and salt-tolerant plants and animals to protect/ re-vegetate the coast	Has negative effect on women's interests and needs in coastal zones, if varieties introduced affect resources specifically used by them. If women are ignored in decision-making, their knowledge and practices concerning environmental coastal resources may be excluded.	Analyze gender relations associated with the use of, access to, management and control of coastal environmental resources. Consult with both women and men when introducing new plants and animal species. Create jobs with equitable participation of women and men.



Tools for integrating environment and development for SUSTAINABLE DEVELOPMENT

- Finding Co-Benefits for food climate and people

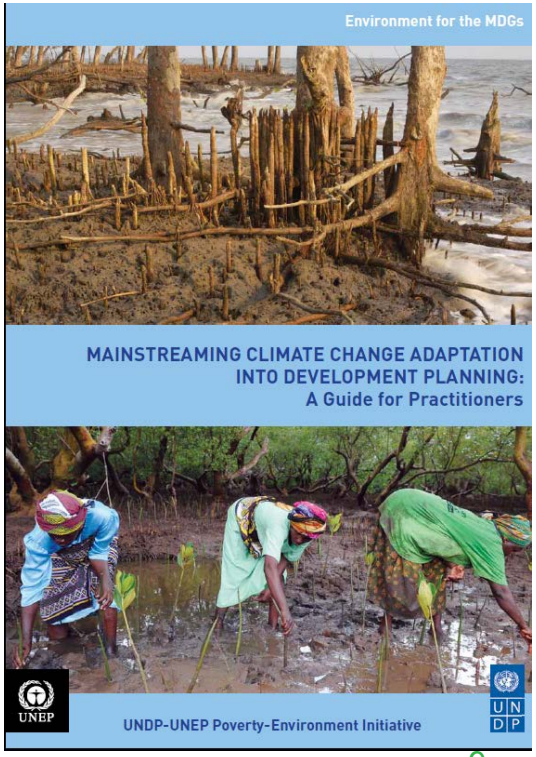
Box 5.16 Harvesting Co-Benefits through Sustainable Agricultural Land Management Practices in Kenya

Sustainable agricultural land management practices, such as agroforestry, mulching, and soil and water conservation techniques, can combine both mitigation and adaptation benefits while increasing agricultural productivity. The incentives for farmers to adopt sustainable agricultural land management practices are twofold.

- On the one hand, farmers generate carbon revenues for contributing to emission reductions via carbon soil sequestration.
- On the other hand, such practices increase the carbon content of the soil and thus lead to higher yields.

Additionally, they facilitate climate change adaptation through reduced water stress and increased soil water retention capacity.

Source: World Bank 2010, GN 1.



Tools for integrating environment and development for SUSTAINABLE DEVELOPMENT

Clarify the links between biodiversity, economy, livelihoods and society in and between sectors

- Biodiversity is intimately linked to sectors such as agriculture, forestry, water and sanitation, industrial development, health, trade, transport, energy, education and tourism. It may not be necessary to commission new research to deliver evidence of the links to biodiversity; existing information can be drawn on from the sources already listed.

Mainstreaming biodiversity and nutrition

In Brazil making the links between biodiversity and food and nutrition has resulted in a programme uniting ministries of environment, health, education, agriculture, agrarian development and social development, with the Fight Against Hunger programme and the National Supply Company responsible for the federal government's food procurement programme.

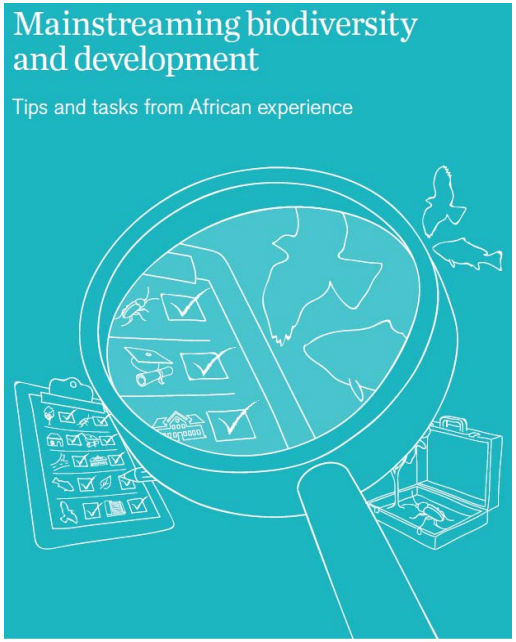
This cross-sector collaboration is working to understand and raise awareness of the nutritional value of native species, while also creating markets for species that are nutritionally rich. The collaboration has encouraged the National Supply Company to buy products from native species cultivated by family farmers, which it then sends to social entities and schools. Government has also put in place a minimum price guarantee for native species. Looking to the future there are plans to raise awareness among school nutritionists about the value of native species, so that they can incorporate these into school menus.

Find out more about this programme at: www.iied.org/camila-oliveira-nbsaps-revision-brazil

LESSONS AND TIPS

Understand what the non-biodiversity sector and ministry priorities are in order to shape your messaging in a sympathetic way.

Ask the representatives from these sectors how they prefer information to be presented to them. If



The Water Energy Food Nexus

- An emerging global sustainability discourse
- Framed as a complex trade-off relationship between water, energy and food 'security' (Middleton et al. 2015)
- Contested boundaries (e.g. water, food, energy, carbon, climate, environment, justice, etc: Wallis 2015)
- Recognises interdependence and potential for synergies through cooperation across all sectors (Rasul and Sharma 2015).

Middleton, C.; Allouche, J.; Gyawali, D., Allen, S. (2015) The rise and implications of the water-energy-food nexus in Southeast Asia through an environmental justice lens. *Water Alternatives* 8(1): 627-654

Rasul, G., & Sharma, B. (2015). The nexus approach to water-energy-food security: an option for adaptation to climate change. *Climate Policy*.

Wallis, P. (2015). A nexus of nexuses: systemic governance for climate response. In: Pittock, Hussey and Dovers (eds.) *Climate, Energy and Water*. pp. 253-267. Cambridge: Cambridge University Press.

Energy supply example

- A Climate Resilient Mekong Project: Alternatives to the Lower Se San 2 Dam, Cambodia
  - From the Nexus Dialogue toolbox http://tools.waternexussolutions.org/

- Construction of one large hydroelectric dam would be unable to pass sediment required for downstream ecological functioning and sustainability of fisheries
- Alternative proposal for four smaller dams would increase sediment flows and generate the same amount of energy

Annandale, G. (2013) A Climate Resilient Mekong Project: Technical Memorandum on Options for Sediment Passage through Lower Se San 2 Dam

Water

WRM

WASH services

Human rights

Today, about 700 million people live in countries experiencing water stress or scarcity. By 2035, it is projected that 3 billion people will be living in conditions of severe water stress. (World Bank)

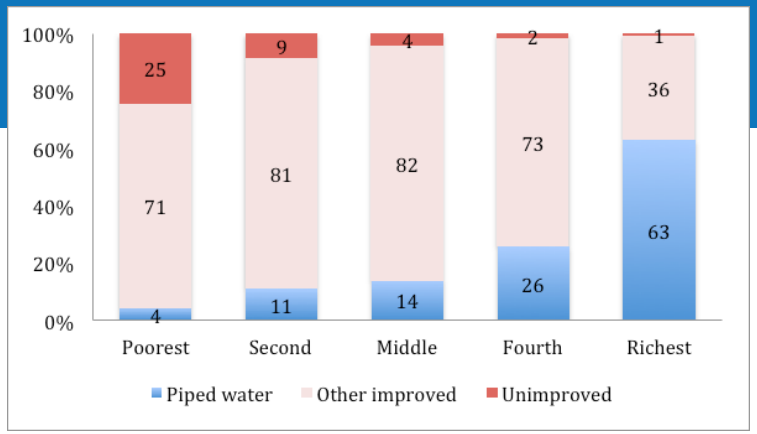
over-use
contamination
climate change

water availability scarcity

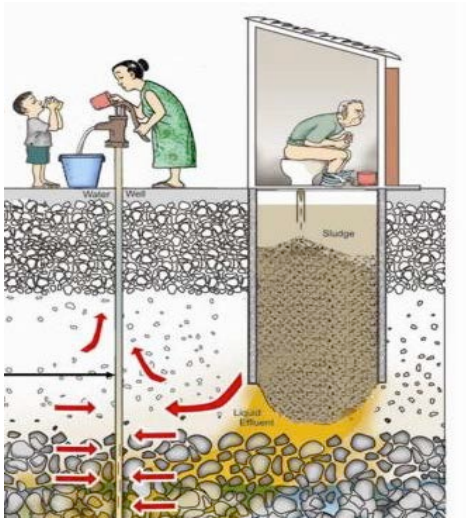
multiple water uses

domestic water use

Major inequality of access (globally and this example, in Vietnam)



Open defecation free, but health and environmental benefits left unachieved



The Philippine Sanitation Alliance (USAID 2008)

Questions for groups focused on: 1. Food, 2. Water and 3. Energy

1. In what specific ways are inequalities (in access to food, water and energy) exacerbated by broader lack of attention to sustainable management of natural resources? Based on these, what new areas of practice and advocacy should be addressed?
2. How can an **integrating approach** (as per the proposed SDGs) encourage synergies rather than trade-offs between the equitable provision of food, water or energy AND environmental sustainability.

NOTE we will circulate around 2 groups world café style