The Linkage between Poverty and the Environment in Tanzania

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Input from the Tanzania PPA process 2002/3

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Outline

- The Tz-PPA objectives and agenda
- Environment and vulnerability to impoverishment
- Coping initiatives
- Overall implications
- Some recommendations

PPA Design, Objectives and Agenda

- **Timing**: Two year cycles synched to feed into the PRSP revision process
- Gather original information

- Explore causality and complex linkages
- Consider the (a) different and sometimes competing priority needs of poor people, (b) likely impact of policies and (c) tradeoffs and potential compromises between diverse interests in order to develop 'best bet' recommendations for poverty alleviation.
- Facilitating the constructive engagement of civil society in pro-poor policy making processes
- Focus of PPA (2002/3): Vulnerability (to impoverishment)
- The susceptibility of individuals, households and communities to become poor or poorer as a result of events or processes that affect them.
- People experience different kinds of risk, however, some people are more vulnerable to impoverishment than others i.e.have less response options to cope with impoverishing situations
- **Data collection:** 30 sites spread throughout Tz mainland to capture the diversity of circumstances people face

Environment and Vulnerability

- Impoverishing forces:
- Natural disasters & Climate changes
- Livelihoods
- Pollution
- Water supply & Sanitation
- Access and Property rights
- Governance and Policy issues
- Some local responses

Natural disasters & Climatic changes

- Droughts, floods, frost, tropical cyclones/storms *vimbunga* varied frequency, and have varying impacts.
- Unpredictable rains frequent (annual)
- Drought more serious
- Floods brief interference with local production systems, but may bring nutrients (Mkongo-Rufiji; Kongo-Bagamoyo);
- Seasonality (distinct annual climatic changes)

Implications: soil erosion (leaching), interference with production cycles - risk to food security, income security, loss of property.

• Poor food preservation technology aggravates effects of seasonality/ climatic changes.

Livelihoods

Processes/Factors:

- Declining natural resource base (fisheries, agricultural soils, pastures, deforestation etc)
- Wild animals and vermin –

Causes:

- Intensive exploitation of resources land pressure (Kyela, Newala); traditional production patterns (game hunting) charcoal making; logging, soil or sand excavation.
- Inappropriate farming practices (outcome of extensive use of inorganic fertilizers Njombe, Songea); slope cultivation (Makete, Kyela), slash & burn (Handeni, Kigoma-r), inappropriate intercropping (Meatu,)
- Inaccessibility to inputs, and Limited (government) extension hence limited expert advice.
- Economic Pressure demand for cash incomes (exploiting new opportunities, diversification) has led to intensified exploitation and additional negative environmental effects.

Livelihoods continued ...

• Poor technology – poor production implements – e.g. small hand hoe '*ngotola*' – inhibits efforts to expand production, hence land lies fallow, which is positive for environment, but cultivated land is used intensively. Poor fishing technologies, therefore fishing done mostly on inter-tidal areas.

Implications:

- Low productivity; loss of incomes, malnutrition
- Food insecurity
- Personal insecurity (wildlife)

Pollution

- Urban pollution due to limited space, inappropriate waste disposal practices (Tandale, Ilala); limited infrastructure; inefficient urban planning and management capacities (to meet demand);
- **Poor (rural) environmental sanitation and hygiene** due to lack of latrines (high water tables Igundu, Chunya), Sandy soils (Mchinga II, Lindi); Slow response to change (traditions)? (Ikombe, Kyela; Mwakizega, Kigoma); inappropriate extension strategies; poor planning (Kibondo refugee camp isolated cases)

Implications: Pollution of water sources (for household use); recurring diseases (waterborne + vector diseases – malaria, cholera); air pollution.

Water supply & Sanitation

- Poor water quality limited or inappropriate infrastructure for clean and safe water supply (urban & rural sites) due to limited local government capacities (Kigomar); poor management of local water supply systems (Mchinga II, Kongo, Semtema); pollution
- Declining water sources mostly seasonal (Newala); competition (rise in demand e.g. pastoralists/cultivators)

Implications: health hazards (use of polluted sources), loss of income and time (costs of fetching/purchasing), conflict.

Access & Property Rights

Resource use competition/conflicts – (site specific, cultural specific) competition between different livelihood groups (e.g. pastoralists v/s cultivators, charcoal makers v/s honey gatherers/beekeepers); between social groups – youths v/s the elderly (Newala, Misufini, Meatu); Gender dimensions (charcoal making men for the urban market v/s rural women's need for fuel wood - Kigoma); National concerns v/s people's needs (National parks - Moyowosi, Karago; Tumaini University

Implications: Security of tenure interfered; Exclusion of some groups; conflict fuelled by additional social tensions (Maasai pastoralists v/s Kilosa cultivators – Twatwatwa) – therefore – limited resources and thus degradation, hazardous livelihoods;

Governance & Institutional context

- Local Institutions for protecting the environment- (examples)
 Kamati za Mazingira (SOZOCO-MAE & BMUs in fisheries; HIAP agriculture Handeni; CBOs in afforestation) – some limited in effectiveness, corruption by government/village officials; focus on revenue collection than environmental management
- Changing macro-economic policy undermining traditional systems/patterns of resource management – pastoralists (selling of land diminishing dry-season pastures); influx of industrial trawling.
- The Village Land Act (1999) some devolvement of resource management – but dissemination and implementation is not uniform
- Extension (government outreach) limited but in demand (Rufiji 6 game off. + 119 wards)

Implications: Limited govt. support; Limited local ownership (dispossession-Loiborsoit), unequal policy influence (e.g. big v/s small fishers-Mwanza) – increased degradation

Some coping initiatives

- Urban waste management HUJAKWAMA (Tandale)
- Local clean-up initiatives but mostly not routinely carried out, limited space to invest in appropriate structures
- Drought resistant crops millet, cassava ('Ondoa njaa Mtwara')
- Shifting cultivation where land is plenty Handeni
- **Irrigation** but limited facility (Same)

- **Fallowing** to allow regeneration (Njombe) but limited time span due to land shortage
- Local water supply management (Meatu) isolated cases
- **Implications:** erosion of traditional initiatives due to resource-use pressure; others are externally supported initiatives; lack of security of tenure (esp. urban) discourages investing in proper waste mngt systems.

Overall Implications

- Environmental factors related to poverty- cross-cutting issues, and interlinked with various dimensions of people's life situations natural, social, economic & institutional.
- Key issue = **Environment issues are livelihood issues** (people's incomes & food security etc)
- Limited or lack of disaster-monitoring (early warning) systems aggravate effects of Natural disasters (predictions done on experience often inaccurate)
- **Resource use options** constrained at different levels rising demand (urban & rural), security of tenure challenged (people still assume traditional access/ownership); falling incomes therefore intensified uses;
- **Unequal Policy influence** Different interpretations and thus different implementation of NR management policy (wildlife protection, land use management, investments)
- Limitations in identification of practical or effective strategies eg local water development plans –limited resources (Kigoma-r water plans)
- Each social/livelihood group vulnerable in different ways (site specific)– Women and Youths more vulnerable due to less control of or access to traditional institutions & resources.

Reducing Vulnerability (some recommendations)

- Maintaining and sustaining what people (the poor) have increasing local participation (in its diversity) in resource use decision making; security of tenure;
- Increasing livelihood diversification opportunities to spread out response options

 off-farm activities; facilitating access to resources (relocation)
- Civic education encourage/facilitate local ownership?, responsibilities and taking charge of local stake in resource management
- Promoting small-scale, local-specific solutions and technologies (fishing, land-use management; food security)