

Peasants, sustainability and gender

Sustainability only becomes a concern when threatened. Therefore, activities to promote sustainable agriculture means addressing the problems of peasants and their perception of unsustainability. Helle Munk Ravnborg analyses gender-specific senses of unsustainability. She tries to avoid the mistake of many people: caught in the trap of comparing female and male headed households. In a context of gender issues this doesn't make much sense if socio-economic conditions are not taken into account.

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The ultimate goal of production is always to maintain or increase outputs at the available level of inputs. Only when this no longer seems possible, sustainability can develop into a prerequisite guiding production decisions. This lesson can not only be drawn from discussions with farmers in Tanzania, but also from looking at agricultural problems in industrialized countries. Where no sense of unsustainability has evolved, such activities have little chance of success, and thus, should be carefully re-considered. In carrying out research focussing on communication between agricultural researchers and peasants in Tanzania, I conducted interviews and workshops with peasants. These concentrated on soil fertility since it is a crucial aspect of sustainable agriculture. The aim was to gain insight into peasants' knowledge on soil fertility (chemical as well as physical) and their perceptions of problems in its maintenance. Furthermore, I wished to identify peasants' notions of sustainability, i.e. their considerations about the long-term consequences of present practices.

The studies look place in three different areas of Tanzania: In the mountainous Kilolo Division, south-east of Iringa town in southwestern Tanzania; in Kipanzelo Division, on the medium-altitude plateaux southwest of Iringa, and in Usagara Division, south of Lake Victoria at the 'cultivation steppe' of Sukumaland

Peasants and soil fertility

Three features characterise Tanzanian peasants' knowledge about soil fertility. The primary source of knowledge is direct observation which, directly or indirectly, tells the farmer something about the soil and its fertility. Soil tex-



Drawing a work-load calendar with women in Usagara Division and discussing sexual division of labour (Photo: Anna van Aurenve).

ture and soil structure are among directly observable qualities. Secondly, peasants make use of indicators, i.e. observation of certain (sets of) phenomena which, based on experience, tell certain things about soil fertility. For example, the presence or absence of specific grasses, shrubs and trees in the natural and regrowth vegetation is a widely used indicator. *Acacia albida* and *Acacia etbaica* are among the trees that, if present in the natural vegetation, indicated higher fertility to peasants in Kipanzelo Division. Thirdly, peasants' knowledge owes its predictive value to observations and interpretations of change. Peasants' ability to sense unsustainability and their subsequent notions of sustainability, thus rely on this third feature.

Observing and interpreting changes

The production systems in all three of the field study areas involve fallow rotation, but to various extents. Change is integral to fallow systems. As cultivation proceeds, soil becomes more dust-like and loses its 'blackness', certain grasses (weeds) appear, and most importantly, yields decline. By observing and interpreting such changes, peasants make decisions about soil fertility management – whether to grow another crop, apply manure or fertilisers, leave the field fallow etc. – in order to meet the overruling objectives of production.

Over time, however, or more rarely, all of a sudden, these changes may take on such dimensions that they exceed the normal cyclic changes of the pro-

duction system. Peasants are thus left bewildered because previously known measures are no longer adequate to cope with the new situation. It is in such situations that a sense of unsustainability may evolve.

Sensing unsustainability

Perceiving certain developments as unsustainable depends in the end on the individual peasant. No general rules can be applied for determining when and to which extent unsustainability is sensed. This depends on the peasant's experiences, on his or her observations and interpretation of these, and on the possibilities for responding to these observations. Certain overall features such as agro-ecological conditions, population pressure, closeness to markets and the level of technology play a part in determining where and how unsustainability is sensed. Still, within this 'room of manoeuvre', a great variety of production systems exist. Not all households in a village have equal access to resources; nor do all peasants possess the same knowledge. Due to such differences, peasants sense unsustainability in different ways, at different times and to different extents. All such aspects should be considered in attempts to identify peasants' problems and their sense of unsustainability. One of these aspects is gender.

A gender-specific sense?

It is insufficient, though often done, to focus on female headed households and compare these with the male headed households. First among the reasons for this is that female headed households comprise at least two different categories. The first category consists of "true" female headed

households, i.e. widowed, divorced and single women, in the study area almost exclusively belonging to a group of resource-poor households. The second category are households which are "de facto" headed by women, because the husband is staying with another wife or, less widespread in the study areas, is working in a different place. They often belong to a better endowed group. The difference is primarily due to a shortage in labour in "true" female headed households. Having more wives is a sign as well as a source of wealth. Though not staying with their husband, second or third wives receive assistance from him, e.g. in land preparation, often done by oxen; or fertilizers. This enables the second category to cultivate significantly larger areas per worker than male and "true" female headed households. Sexual division of labour within the household is another source from which a gender-specific sense of unsustainability can evolve. Many stereotypes exist concerning the sexual division of labour in African agriculture. A prominent one portrays men sitting under a tree, drinking beer and leaving all field and housework to women. Although such cases can be found, this picture does not do justice to all men and women in Africa, nor in Tanzania. Sexual division of labour is another dynamic feature which changes with the production system and over time.

Despite the danger of contributing further to such stereotypes, I will here dare to sketch a picture of the sexual division of labour in the three study areas. This picture shows men as having the chief responsibility for land preparation – and cattle – while women are mainly responsible for weeding and in some cases harvesting. In addition, some crops are primarily regarded as women's domain (sweet potatoes and, in Usagara Division groundnuts and bambara nuts), while others are male domain.

The experiences of men and women differ, based as they are on their respective main responsibilities. Both men and women are concerned with yields and both perceive declining yields as a problem. Both are aware of possibilities of acquiring new land in case they see a need to expand the cultivated acreage or leave a field fallow. However, due to their different experiences, there is a tendency that men and women attribute the problem of declining yields to distinct causes.

Observations differ

Men, mainly involved in land preparation, tend to focus on declining soil fertility as the principal cause of declining yields. It is during land preparation that many of the indicators of soil fertility best can be observed: the composition



Despite any sexual division of labour, women in Kiponzelo Division participate when preparing fields for cultivation. (Photo: Helle Munk Ravnborg).

In Kilolo Division, no sense of unsustainability has yet developed among peasants. Fertile land is still available allowing for fallow rotation and, though recognized, peasants do not perceive soil erosion as a problem. (Photo: Helle Munk Ravnborg).



of weeds emerged since the last weeding, the structure of the soil etc. Furthermore, as a consequence of the prevailing bias towards men in agricultural extension and credit systems, inputs like fertilizers are mostly administered by men. This fact adds to men's "natural" preoccupation with soil fertility. Therefore, when unsustainability is sensed, the notions of sustainability which men develop contain visions of more fertilizers, more manure, better crop rotation systems etc.

Women, on the other hand, tend to attribute declining yields to disease and pest attacks on the crops rather than to declining soil fertility, since women have the opportunity to monitor crops during weeding rather than soil.

These tendencies were observed at four workshops held with peasants – male and female – in Kiponzelo and Kilolo Divisions. Brainstorms on major problems revealed that women tended to concentrate on diseases, not only as

a category, but by specifying each individual disease whereas men concentrated on problems relating to soil fertility and inputs. Following the brainstorms, each participant was asked to rank their five most important problems. Problems relating to soil fertility were more frequently mentioned among the top-five problems in the workshops with mostly male participants than in the workshops with female dominance. Here, problems of pests and diseases ranked highest.

Implications for action

Gender is, as already mentioned, far from the only aspect which determines the development of different perceptions of unsustainability by peasants in a single area. Nor is it, in the study area, the most important aspect. More important is what the peasants refer to as *uwezo*, a very broad term covering strength, power, capacity, ability etc. With this term peasants refer to the importance of having strength to work (as opposed to being sick or old); having power and cash to ensure inputs such as fertilizers, land of a certain quality, labourers or ox-plough for early land preparation etc.; being a 'smart' farmer. What emerges is thus a socio-economic classification with access to productive resources as the major criterion. Having rich access to resources provides better opportunities for coping with change. Differences in experience, perception of problems and notions of unsustainability thus owe more to the socio-economic status of the household than to gender divisions within the household.

Nonetheless, a gender-specific sense of unsustainability could be traced in the study areas. This underlines the importance of extreme carefulness when launching activities to promote sustainable agriculture. Such activities have to be carefully designed, not only with regard to a specific area as a response to its general problems, but also to specific groups within that area. If not, such activities are bound to fail either because of general lack of interest, or because of lack of interest from specific groups, often the less articulate, most commonly the resource-poor and women.

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