

Farmers' participatory evaluation of a community-based learning process: "Strengthening Folk Ecology" for integrated soil fertility management in Western Kenya

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[As of 19 October 2005, the Powerpoint presentation provides the most coherent explanation of the research. This word file offers a bit more depth in places but only incompletely presents the authors' efforts at synthesizing farmers' contributions, currently present in the results section only as direct pastes of verbatim commentary from interviews and meetings. Please contact the authors to follow up on this material...]

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Abstract

Farmers and researchers in western Kenya have used community based learning approaches to jointly developed a "dynamic expertise" of integrated soil fertility management (ISFM). This approach builds on farmers' "folk ecology" and outsiders' knowledge, taking action research on natural resource management beyond methods that are descriptive (ethnopedology) or curriculum-driven (farmer field schools). The paper presents and analyses experiences from the on-going participatory monitoring and evaluation of the Strengthening "Folk Ecology" project to document and critique the community-based learning process and its sustainability. Issues include the trade-offs and tensions between science and action-oriented research as well as the true potential of participatory methods for "leveling" power relations between different actors.

Keywords

Local knowledge, Participatory monitoring and evaluation, Farmer experimentation, Natural resource management, Soils, Africa

Introduction

Since 2001, TSBF-CIAT has been involved in community-based learning initiatives in western Kenya focusing on integrated soil fertility management. These initiatives aim at strengthening local expertise in ecosystem management ("folk ecology") through a dynamic process integrating the knowledge of researchers and farmers. This process is an experiment in opening communication between different knowledge systems that must contend significant differences in power, culture, and assets. It has produced many useful and unexpected outcomes in terms of experimental

methods, research methodologies, and soil fertility management options suited to local conditions (Ramisch *et al.*, IJAS).

One component of the research has been building the capacity of farmers (and biophysical researchers) to conduct relevant monitoring and evaluation not only of the products of the learning but also of the learning process itself. As the project begins its second phase in 2005, farmers, researchers, and other local stakeholders are conducting an impact assessment of the research and research process thus far. This impact assessment is evaluating the empowering effects of participation in “research” in the farmers’ own terms. The value of this approach should be seen especially in documenting and assessing the areas where the project extended beyond simple soil fertility management. Such areas include matters of group organization, communication strategies, and financing. It also covers the various “branching” activities farmer-led research over time, such as women’s initiatives exploring the potential of soil fertility management techniques on “non-traditional” crops like indigenous home garden vegetables.

The paper uses the 2005 assessment process and examples from the on-going participatory monitoring and evaluation to document and critique the community-based learning process and its sustainability. Issues include the trade-offs and tensions between science and action-oriented research as well as the true potential of participatory methods for “leveling” power relations between different actors.

- Farmer participatory evaluation (methods, approach / philosophy)

This paper critically examines experiences of a project working to broaden the repertoire of soil fertility management and adaptation strategies available to smallholders in western Kenya by strengthening local ecological knowledge (“folk ecology”) through dialogue with outside knowledge systems. Nonetheless, “knowledge” alone whatever its origin (“local”, from “outside”, or a hybrid from multiple sources) is insufficient for overcoming social, political, economic, or environmental constraints, and actors apply their knowledge within a broader livelihood context (Amanor, 1994; Nadasdy, 1999). Specifically in Western Kenya, an area historically neglected by central authorities, rural populations contend with poor infrastructure, poor market access, high rates of HIV+/AIDS infection, and widespread, semi-permanent out-migration of youth (predominantly young men) (Crowley & Carter, 2000). Both land and labour shortages frequently limit agriculture in western Kenya, which is also beset with many biophysical problems beyond soil fertility decline, such as significant climatic variability, and widespread crop pests, weeds, and diseases.

Most research on local environmental knowledge and communication between knowledge systems has stressed understanding the importance of local practices. This has either addressed the “scientific” basis of indigenous practice (e.g. Ettema, 1994; Sikana, 1993) or demonstrated how natural resource management currently neglects (but can be improved with reference to) local knowledge and skills (Mazzucato & Niemeijer, 2001; Röling & van de Fliert, 1994; Talawar & Rhoades, 1998).

The Strengthening “Folk Ecology” project (SFE) went beyond such efforts, testing and applying community-based learning approaches and farmer-led experimentation to reduce the epistemological, communicative, and spatial distance between local communities and scientists. It consciously stressed an adaptive learning process between farmers and researchers to develop a shared, “dynamic expertise” of soil fertility management. This contrasts with the structured curricula of “farmer field school” approaches, which build farmers’ understanding of science as a

replacement for simply following scientific recommendations (Dilts and Hate, 1996). SFE studied and documented how “dynamic expertise” is generated, shared, or withheld within community-based learning systems. This paper begins by outlining some theoretical underpinnings of such a knowledge-based approach.

Given the abundance of participatory research “success stories” describing innovative approaches and methods, the bulk of this paper is devoted to lessons learned from the application of the SFE approach. The process of long-term, multi-stakeholder dialogue and the “dynamic expertise” generated by community-based experimentation reveal complexities and messiness inherent to knowledge-based approaches. These will not be overcome with “more” or “better” participation. We conclude the paper with a critical examination of the prospects of SFE for improving soil fertility and empowering local communities, the limitations of experimentation, and the challenges of scaling up participatory action research.

Strengthening “Folk Ecology”

- community groups
- knowledge, communication, dynamic expertise
 - ISFM (regimes?)
- research-farmer interface (power, knowledge, resources, environment)
 - logic of experimentation
 - experimentation process (learning from co-learning)
- changing researchers’ paradigm (e.g. as justification for FPE)
- the shift from normative top-down planning to a bottom-up approach and networking.

Integrated soil fertility management and the Strengthening “Folk Ecology” project

African agriculture’ low productivity is often attributed to the low use of purchased inputs – less than 2% of the total world consumption of inorganic fertilisers (Nandwa & Bekunda, 1998). However, the failure of many decades of scientific research to raise the productivity of African farming systems has prompted agronomy and soil science to move beyond a paradigm of simple “nutrient provision” to embrace integrated soil fertility management (ISFM). ISFM is a holistic approach to understanding and managing the full range of processes (biological, physical, chemical, social, economic and political) that influence soil fertility (TSBF, 2005). That ISFM approaches are interested in the knowledge of local people parallels a more general growth in interest in marginalized knowledges, which has its roots in the of humbling of western-trained scientists after more than half a century of failed development enterprises (Kothari, 2002).

The SFE project has operated in western Kenya since 2001, led by the Tropical Soil Biology and Fertility Institute of CIAT (TSBF-CIAT) and supported by African Highlands Initiative (AHI), the Kenyan Agricultural and Forestry Research Institutes (KARI, KEFRI), Ministry of Agriculture (MoA), and local NGOs such as the Sustainable Community Based Input Credit Scheme (SCOBICS). The project goal is to show that local “folk” knowledge and practice can be strengthened through generalisable and repeatable processes rooted in local institutions, actors, and processes, using co-learning activities that are not inherently reliant on the presence of a project.

Expanding the knowledge base is an inherently political process, which confronts different versions of “local” knowledge within a framework of differentiated resources, skills, and authority. Since this expanding core is constantly adapted and reshaped by the co-learning process of challenging and validating knowledge shared between actors (local communities and outsiders), we have termed this a “dynamic expertise” of skills and assumptions (Figure 1). Such a model does not automatically presuppose vast differences in epistemology or “cosmovision” between farmers and other populations (Millar, 1993), nor does it assume important synergies between different knowledge sets (Sumberg *et al.*, 2003). However, identifying and understanding differences (and similarities) where they exist must constitute a starting point for any collaborative venture, especially given the many ways in which concepts of soil ecology might be embedded within more holistic concerns about crop performance, climate, water, pests, or markets).

Figure 1 near here

The SFE project began with an interest in broadening the discussion of local soil agro-ecological knowledge beyond ethnopedology to see soil management within its local context. In the terminology of Niemeijer and Mazzucato (2003) identifying and using the “grammar” (local theories) rather than just the “sentences” (taxonomies) of local knowledge provides a much clearer insight into how farmers will deal with changing circumstances and new crops than the static way in which local taxonomies are often treated.

The project has followed an iterative procedure of establishing (and revisiting) the norms of interaction between researchers and farmers for conducting a set of activities seen in Figure 2. The highly abstracted diagram of activities portrays the researcher-farmer interface at the heart of the generation of a “dynamic expertise” of knowledge and skills, with iterative cycles of experimentation and reflection around new technologies. Experience with the process of designing, testing, and selecting technologies has been studied continuously at the community level (Misiko *et al.*, 2004). Documentation (by researchers and farmers alike) of the process and products of the on-going dialogues is critical for the knowledge sharing that feeds into the iterative generation of “dynamic expertise”. Documentation and knowledge sharing also feed into the scaling up and ultimate sustainability of the SFE approach.

Figure 2 near here

The research-farmer (outsider-local) interface

Groups and group activities have been the preferred means for engaging existing social networks. Previous experience in the region (Misiko, 2000; Muruli *et al.*, 1999) showed that group-based approaches allow farmers of varying resource endowments to reduce the risks of experimentation and to benefit from shared resources (pooled labour, farm implements, manure, etc.), while also learning from one another and jointly participating in planning.

Although explicitly a project about soil fertility management, SFE necessarily brings together actors with very different power, resources, priorities and expectations.

The project has therefore always remained alert to how these differences might manifest themselves in interactions as tensions or conflicts, expressed openly or subtly.

For example, it is clear that farmers have multiple reasons to participate in a “project” (*mradi*), many of which are only remotely connected to a desire to strengthen one’s own “folk ecology”. Distinguishing “research” (*utafiti*) from “development” (*maendeleo*) is hard enough for researchers increasingly pressed to deliver “impact” from their studies; participating farmers usually assumed that *utafiti* should simply be a process of “educated experts” demonstrating “known facts” in the community. This grew of course from farmers’ familiarity with being “taught” passively to follow scientific recommendations under the conventional “transfer of technology” approach (Salas, 1994). Many development NGOs in the communities also had a history of paying farmers to attend meetings (“lunch” or “sugar”), paying for collective work, or providing free inputs. These payments are today implicit in the term “*mradi*”, given ironic names in local vernacular like “facilitation” or “empowerment”. The perceived failure of SFE to pay such “facilitation” has been a frequent source of contention between farmers and researchers, although other participants decried such expectations as “bribing us to do our own work”.

MM- Attending the funeral, or better contributing ‘a cent’ is an unspoken expectation. When researching in an area plagued with disease and poverty, it is likely to lose a local inhabitant that you know well. Since participation is so dependent on goodwill, not a single farmer may demand that you attend burials. Nevertheless, on many occasions participants ‘informed’ me and my colleagues. ‘Informing’ should not be in vain. We were expected to show sympathy through contributing a ‘cent’. Because we missed to contribute few times, we may have lost valuable participants as a result.

“Scientific” knowledge is itself deeply contested, with debates between various paradigms, disciplines, and epistemologies. A cyclic pattern therefore emerges that whatever the farmer knows or is currently practising is at least partly at odds with the dominant scientific discourse (Ramisch *et al.*, forthcoming). In the 1940s, farmers in western Kenya were urged to adopt iron hoes and ploughs to increase their labour productivity, while today they are told that such implements cause soil erosion and therefore undermine their productivity (Crowley & Carter, 2000). Scientific debates about the sustainability of local practices are played out in rural Kenyan communities only through intermittent contacts with continually changing “outside” actors and their differing messages. This mutability (and farmers’ sceptical response to it) is reinforced by the political jockeying of local NGOs, who must win adherents to their projects to demonstrate “impact” to their donors. In so doing, these “outside” actors use polemical presentations of how their message differs from that of “rival” actors, extolling for example the virtues of “organic” agriculture or agroforestry or farming based on agro-chemical inputs as the “new”, “best” practice. The notion that an existing repertoire of soil fertility management already exists or should be built on does not enter the political equation in such jockeying.

Site and methods

Site description

The SFE project involves ethnically distinct communities chosen along an agro-ecological and population density gradient from Vihiga district through to Busia and Teso districts (**Table 1**). All the sites have some previous exposure to either international or local non-governmental organisations (NGOs) working on soil fertility management.

Table 1 near here

The sites' climate is bi-modal, with rains falling in the "long" first season (April-July) and again during the "short" second season (October-December). Livelihoods are subsistence-based and (as elsewhere in western Kenya) maize is the dominant staple food. Other crops include beans, sweet potatoes, sugarcane, bananas, cowpeas, sorghum, millet, cassava, kale and other green vegetables, coffee, cotton (Busia), French beans and tea (Vihiga).

Western Kenya is historically an area neglected by central authorities. Rural populations here contend with poor infrastructure, poor market access, high rates of HIV+/AIDS infection, and widespread, semi-permanent out-migration of youth (predominantly young men) (Crowley & Carter, 2000). Both land and labour shortages frequently limit agriculture in western Kenya, which is also beset with many biophysical problems beyond soil fertility decline, such as significant climatic variability, and widespread crop pests, weeds, and diseases.

Methods

- farmer data collection
- collective group meetings and
- individual interviews, FGD, key informants
- farmer-led review in 2005: what were strengths / weaknesses of Phase-1, what goals for Phase-2

Research questions

- what dynamic expertise has emerged, what impact on livelihoods?
- how to improve communication and group dynamics?

Farmers' evaluations of experimental results

- tabular format?; make heavy use of verbatim
- * **experimental results (collective plots) and individual... what worked and not**
- * **which technologies count as "folk ecology"**
- experimentation vs. products

* **experimental results (collective plots) and individual... what worked and not**

[Dis-Ch] "Late planting makes comparisons different"... "people pass and say "no weeding? These people are joking here"..."

[Boaz-Eb] "High quality manure should be analysed to know its real usefulness"

[Gid-Eb] High quality manure: there are "questions about what amount is appropriate to your condition"

[Han-Mu] Learned to improve soil fertility with biomass [term?], “FYM”, and organic fertiliser – the outcomes are visible as harvests

Things learned...

1st. thanking researchers [Bea-Eb:] “for all the good things brought to Emuhaya”...

[Dis-Ch] “What shows that people have succeeded?” [has a list of people, their management options – gave to us]:

[Ken-Bu] Raised awareness *fungua macho*; that **inorganic is only source of P, which is missing from soil**; learned names fertilizers and “proper use”

[Pat-Bu] chased myth that poor yields was because *imerogwa kwa jirani* – soil “acidity” can be solved by liming

[Pat-Bu] Learned that “mimea si kwekwe” (plants are not all weeds)... with KWAP we saw that Calliandra is something good... now with TSBF learn that Tithonia is also good... now we learn the goodness of soya

[Pat-Bu] Crop rotations: different plants let soils rest / give soil different foods

[Phiti-Bu] Learned what is in the soil that can be returned to soil to improve its fertility

[Phiti-Bu] that tree leaves can be a manure (“majani ya miti ni mbolea”): “as an old man, I was surprised to learn this... that you can know the tree’s use by its appearance (sura yake) and the bitterness of its taste (ukali yake)”; Learned about “making rotations”, that legumes (“maharagwe, g’nuts, Mucuna”) have their own secret (siri)...

[Lucy-Ch] We have known crop rotation. Our favourites were wimbi, sorghum, maize but now know the inclusion of legumes (e.g. cowpeas planted in July, “works so good”, helps in bringing nutrients

[Lucy-Ch] Soybeans. “We used only to buy for eating. Now we know it improves the soil and helps in the body”

[Lucy-Ch] We have known the use of fertilisers... “People used to see that fertiliser makes the land become old fast”; FYM: we used to burn this before (?), “not sure why”

[Dis-Ch] Mucuna (“taking something that is not edible: it is not easy to take it seriously”)... indigenous vegetables (“used to pick them widely but now are concentrating on gardens”)

[Dis-Ch] Really educated us on improved soil fertility, especially crop rotation and legumes; FE helped sensitise on income generation (legumes) and improved food security with organic and inorganic

[Bea-Eb] Want to start by thanking researchers “for all the good things brought to Emuhaya”... “didn’t have bananas, maize, even [good] beans”, “got bananas from KARI, beans, potato vines”... “Before we used to like 614, 622 – research brought modern, better varieties, can now harvest ‘mengi’ from a small plot”

[Bea-Eb] High quality manure: “all the ways to improve the quality”... “can use on mboga like sukuma, it grows well”, “the plants we are using to send kids to school and something for them to eat”

[Boaz-Eb] Learned soil nutrients (“N”), crop rotations, infected plants & diseases, striga control, best uses of fertilisers & FYM, control of plant pests, preparation of FYM

[Gid-Eb] “Before Folk Ecology, would meet with KARI, with TSBF but never really understood their work”; began as “kitu cha dadharau...”, began as 3 experiments – **resource quality**, the various different materials, each giving such different results... “cereal-legume rotation: soya, yellow gram

[Han-Mu] Learned to improve soil fertility with biomass [term?], “FYM”, and organic fertiliser – the outcomes are visible as harvests

[Han-Mu] Increase the knowledge of crop rotations – the rates, proper crops (e.g. soy, Mucuna, groundnut) → technologies [there was more?]

[Han-Mu] soya... “by increasing other people’s yields it reduces theft, increases peace and happiness”

[Vic-Mu] TSBF “brought so many things” – Calliandra (multiple uses), Tithonia (along the road), FYM, “makata’s uses in manure, mulch” [!!]

Which technologies were attributed to SFE project?

- issues of partnership blur attribution... all “outside” become one “mradi”?

[Ken-Bu] push-pull, awareness of SWC, digging *mtaro* terraces

[Pat-Bu] Spacing: can experiment putting “3 rows soya : 1 row maize”, allows you to calculate the yield and what you would get in the market

[Lucy-Ch] Improved the land: before planted maize without even using a rope. We made long lines and dug big holes, which meant the yields were low.

[Boaz-Eb] Learned “control of soil erosion”... “mavuno had gone down by 25%, maize especially” [everyone asks “how did you know this? How do you determine by how much?”... Answers that he has observed the increase in his own plot, before would see 2 gorogoros now gets 2 gunias of maize in the same area – but this would be 4 kg → 180 kg???

[Bea-Eb] Learned that Napier can “shika soil” and keep water from eroding the land

- experimentation vs. products

[Lucy-Ch] Tithonia... is better on mboga as “an experiment only”.

[Dis-Ch] Since getting soya, have planted outside experiments (“reduces malnutrition”); “Enabled farmers to identify own farm problems and ways to combat them...” (ways to plant legumes, etc.)

- experiments as demonstrations

[Phiti-Bu] that even crop residues are a manure (“hata hii makada ni mbolea”). “this was something that we old people just cut, but it can be put in a boma and used as manure”

[Gid-Eb] “stovers used only to be kindling, but now is mulched, used as a manure [!!]”

[Phiti-Bu] learning from visits to Nyabeda and Emuhaya (“we even saw that maize can be planted under trees!”)

[Vic-Mu] “makata’s uses in manure, mulch” [!!]

Nonetheless, attitudes can also be an important barrier. Many farmers joined the project believing their own knowledge was “out of date” compared to what scientists might provide and sceptical that anyone would want to learn what they knew or did (“what could I teach you?”). The idea that *utafiti* was going to take them towards destinations that neither they nor scientists already knew was *disappointing for some...* Many of the scientists also entered the project with high hopes that “indigenous knowledge” would provide new insights into soil management, or explain the wide variability of farmers’ practices. These attitudes have not changed overnight. SFE has provided new knowledge and new, shared experiences for its participants to learn from, but as with other knowledge-integrating approaches, learning “scientific” or “local” ways of thinking will modify participants’ common-sense understanding of the world but not radically transformed it (Devereaux & Evans, 2004). Repeated application and improvement of dynamic expertise can persuade participants that we are solving our problems, but this knowledge (or confidence in it) is insufficient for persuading others to follow us.

Early successes or failures with innovations can wrongly suggest universal truths, which discourage and become disempowering when taken to new contexts. Farmers in Ebusiloli included lines in one of their dramas that Tithonia was such a good input that “even a handful will bring you twice as much maize”. Not surprisingly, such impossible claims did not spur widespread adoption. Scientists initially assumed that large sign boards on collective fields would be stolen, and did not want to make these either accessible to farmers or permanent features. However, none of these boards was ever tampered with...

Farmers' evaluations of research process

* **highlights the participatory research process about communication and activities [headings]**

- owning the project (cutting down the demo, lunch issues, paying for labour – enabling vs bribing to help ourselves) (involving other partners?)

Feedback and communication: Whose project?

What does “feedback” represent? What was lacking?

[Gid-Eb] “We are just being used (*tumetumwa*) unless we are getting the feedback we need”

- **Soil samples, harvest samples... individual or regional conclusions [DELAYS = DISEMPOWERING - which religion is this? (returning to basics)]**

[Dis-Ch] Minimal follow-ups – No feedback on results (e.g. of soil samples) or on the tests... “may use mavuno, want to know why it is not responding as well as the control”

[Gid-Eb] Isaac is an economist “but we have never had a report, don’t know if we are losing money or are getting a profit”

[Gid-Eb] “On many occasions you are taking pictures, yet we have had no cassette, no video, no photos up to now”... “samabaza hiyo maneno”

[Vic-Mu] Results from soil samples: if you go taking samples (*kufanya utafiti* as a secret activity!) we need the answers... “if we see poorly performing fields, want to know is it the soils or the research (the crops) itself?”... select fields like Elizabeth’s [e.g. really poor ones?]

- **Farmers criticizing each other for not sharing information (documentation to solve?)**

... [Gid-Eb] “Even ‘women without education from school’ can explain what nutrients are missing [njaa iko]”

[Bea-Eb] Groups that were trained / members that go on tours don’t share information – give handout materials that can assist people to disseminate / “explain what they have learned”

[Vic-Mu] “The big green board of TSBF is good, has stayed for long and people (even from America!) stop to read it”

- **Modes of communication / address**
- **tours to learn / field days**

[Ken-Bu] Tours to see how others are doing or how using technologies

[Pat-Bu] Tours to Emuhaya and Nyabeda – “yatulisaidia” and “tupa moyo zaidi”... such visits are helpful because they “give me targets” to aim for

[Lucy-Ch] Educational tours... certificates for active farmers

[Dis-Ch] Exchange visits: “there have been participants that have not shared their learning with everyone”

[Dis-Ch] Field days at various stages of the crop growing: the responses are different at different moments; Try to link farmers with other stakeholders because they have different resources and knowledge... “moral and financial support”

[Bea-Eb] “the way that people have said, visits to other places are helpful” [for motivation, for learning?]

[Gid-Eb] Continue the tours and trainings: when people go they need compensation for the work that they left behind; Connect the groups of the different sites...

What incentives for participation in research?

- **setting targets & goals / competition & recognition**

[Pat-Bu] “If we are starting Phase Two, groups should have their own targets”... we should “want to obtain specific knowledge from the trials”

[Ken-Bu] Competitions between groups... Who produces the highest or whose plot is the best should be given awards

[Pat-Bu] ...If there are competitions, these could encourage others to join in. Otherwise we are just hanging on one group that is dying there.”

- **Honouring commitments: Long meetings – time is not “free”; REGULAR meetings**

[Lucy-Ch] Regular meetings: right now only send apologies for missing meetings, but meetings should be replaced, not just dropped completely.

[Lucy-Ch] No regular follow-ups... not coming at the “right” times or missing crucial moments (e.g. late planting)

- **No “facilitation” (“cost sharing”)**

[Ken-Bu] “No motivation to farmers” – people are busy: In case of prolonged meetings, try “kupewa kitu kidogo” (give something small)

[Ken-Bu] “Active farmers” (this is not everyone) can be activated and motivated to inspire others

[Pat-Bu] To assist people with inputs (could use “soft loans”?)... someone might be given 20 kg of soya but [he] cannot afford the money for inputs

[Phiti-Bu] Do like the sugar cane companies (watu wa miwa): give seeds and fertiliser, bring fertiliser on time, then have people pay for inputs at the harvest... at planting time most of us simply do not have cash money... (use credit based on work? “mkopo wa kazi”)

[Lucy-Ch] “Because farmers are not able to afford seed or fertiliser we need assistance”

[Dis-Ch] “We can plant together, but during harvesting you bring other people (non-locals) to come harvest... yet we want to see the results at harvest” [among other issues of equity...]

[Gid-Eb] Field days: “people will come... there should be cost sharing”

[Vic-Mu] Long meetings, need to pay for lunch, numbers are dropping

- ... vs. soda

[Pat-Bu] “I attended 80 – 90% of the meetings...if people think they are good, they will sit and listen and then do these things in their fields”...

[Phiti-Bu] Want meetings to be short: “we are old, we are busy”... don’t give “soda”: “if people become used to something like getting sodas, people become lazy”

[Gid-Eb] Farmers should learn to “toa pesa kidogo” [like John’s language of putting hand in your own pocket]: “use soybean to improve your [maize] yields, improve food security and incomes... soya can be a dairy meal, or food for kids and everyone else”

Groups and politics: Whose participation?

[Pat-Bu] “We all want our groups to be strong, to have dynamics”... “there is a conflict of interests”

- **forcing ideas of participation vs. elite capture (whose voice)?**

[Ken-Bu] over-emphasis on groups: Lack of regular visits by “facilitators” to farmers... visits are made “to groups” only... “groups cannot grow without farmers”

[Pat-Bu] Emphasis should be on supporting “serious groups”

[Pat-Bu] jukuma la --?... understanding of what the trials are for... visitors are confused, ask “whose is this?”...

[Gid-Bu] Continue the tours and trainings: when people go they need compensation for the work that they left behind; Connect the groups of the different sites...

[Vic-Mu] “If go to kijiji changu, see us as a ‘trial farm’ – this could attract many more people”

- **the poor are not us (laziness critique?)**

- **relationships with extension**

[Gid-Eb] Community facilitator: thanks for providing his motorcycle, his fuel... “if you are going to use a facilitator, choose someone from among us: he’ll share our downs and our ups and our profits”

[Gid-Eb] “Wazi katikati yenu” – “our community facilitator has a motorbike and a phone but communication is still difficult... he would change the times and places of meetings”

[Gid/Boaz-Eb] Groups are still associated too much with one institution: TSBF = Emanyonyi, KARI = Muungano (Boaz also agrees to this view)

- **researchers hiring outside labour**

[Dis-Ch] “We can plant together, but during harvesting you bring other people (non-locals) to come harvest... yet we want to see the results at harvest” [among other issues of equity...]

[Gid-Eb] “The use of people from outside (werevu??) to harvest is very bad. If you’re going to pay someone, you should pay us”

-scaling up issues...

- **inclusion / exclusion**

[Vic-Mu] How to really involve “the vulnerables”: “people are afraid to join us because of shame at their nakedness”, etc

[Pat-Bu] “As a “child of Michuki” [i.e. a local councillor], I am concerned that others outside our groups are not benefiting. If there are competitions, these could encourage others to join in. Otherwise we are just hanging on one group that is dying there.”

[Dis-Ch] Should target many groups, a larger area... “we don’t want just to be a “nuclear group””

[Boaz-Eb] Impact is still madoadoa [spots]

- **opting out (Misiko work)**

[Bea-Eb] Many people have joined the groups, others have left... “the way that people have said, visits to other places are helpful” [for motivation, for learning?]

[Boaz-Eb] Many people who left since 2000... they don’t want to return, to sit with us, but they should be reached using “qualified farmers”

- **training us to continue**

[Boaz-Eb] “The people to develop us is ourselves – researchers must accept that”

[Ken-Bu] Farmers need training to train each other (“need enough seminars”)

[Han-Mu] “Have people trained as trainers so that your efforts stay behind after the project leaves”

[Dis-Ch] Use local group and “other farmers from around” (invite village elders, community) to participate in harvest... a good way to share results and impressions

Researchers challenge themselves

Power and accountability

[Dis-Ch] “your coming alone can be enough to motivate us... people think “our people are still following us””

[Gid/Boaz-Eb] Groups are still associated too much with one institution: TSBF = Emanyonyi, KARI = Muungano (Boaz also agrees to this view)

[Vic-Mu] “Getting a market [market? Or “good price?”] for soya is still a problem. One gorogoro can go for 20/=... too far to hire a lorry”... “at least glad we can sell to the researchers” [!!]

- validating knowledge and power

[Gid-Eb] “Certificates are muhimu to help def[en?][ine?] the knowledge that people are trying to communicate”, “make farmers your deputies”

[Pat-Bu] “Pewa cheti” – give awards / recognition for the best

- who is “Folk Ecology”? are students TSBF?

Communication: Language issues

- Farmers “learned”, Folk Ecology “raised awareness”, “educated”
- “Moral and financial support”
- Detailed discussion and complaints about specific seed varieties, examples given of amount of money from sale or kg’s yielded from the amount of seed given
- Polite praise (community facilitator, organic and inorganic, Tithonia; improved food security)
- “Our farmers” vs. “our people” [our researchers] [cf. Dis-Ch “your coming alone can be enough to motivate us... people think “our people are still following us”
- Modified names: “focal ecology”, “push+pull”

Showing one’s “non-local” knowledge with discourse elements:

- *Credentials as a “good” project member, using (or not) the nutrient nicknames*
- *Not using the nicknames – may not have been involved, knowledge of “Nitrogen” comes from elsewhere*
- *More market-oriented farmers, or those adopting the language of the extension agents or researchers: “DAP, CAN, N...”*

Challenges and opportunities

- scaling up and out: replicability, applicability, sustainability? (“only a few hundred households”... will even “good impacts” convince doubters that this approach is worthwhile?)
- relevance to other disciplines?
- independence of evaluation
- including farmers’ own assessment of projects in workplans, donor reports (this is not an extra!) → farmers asking (Nov 2004) that their evaluation of projects count towards the assessment of how well researchers were doing their jobs (can CG accept this? how?)
- issues of power:
 - ability to speak freely, to criticize when vulnerable? (farmers AND researchers)
 - Sikana fund? (providing % of project resources directly to farmers to manage as they will... a “development” component of any “research”... but does it address dependency?)