

PROCEEDINGS OF THE FSN FORUM DISCUSSION No. 41
**LOOKING BACK TO EFFECTIVE RURAL PRACTICES ... DID WE MISS
SOMETHING?**
FROM 31 AUGUST TO 21 SEPTEMBER 2009

Summary available at:
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I. GENERAL INFORMATION

Duration:	from 31.08.2009 to 21.09.2009
Number of participants:	14
Number of Contributions:	14

II. INTRODUCTION OF THE TOPIC

Forum Colleagues,

My name is Walter Mwasaa I am a relief aid worker with specific interest in food security in Sub-Saharan Africa, having worked in Somalia and currently in Sierra Leone.

I am often challenged by the widespread food shortages and livelihood insecurity in rural areas. Talking to the local populations in Sierra Leone, Somalia and Kenya, there are often recalls of times gone by when the same communities were able to provide enough for themselves.

I am doing a research project Kenya on changing livelihoods looking back at how the changes in food production and people's way of earning incomes have evolved with a special interest in what could have been carried forward to ensure self-sufficiency.

It is certain that communities are practising modern systems of production that are geared to producing more food and improved living standards. I am however at a loss in looking at how many communities are still unable to produce sufficient food. Policies and structural systems are partly responsible for the situation.

Since the end of the World War various attempts to assist poor countries have been put in place but success has been variable and in some cases retrogression with development efforts has resulted harming the very fragile communities it had hoped to aid.

Robert Chambers ("Whose reality counts? Putting the last first") among other questions challenges us to "put the last first" and attempts to ensure that our assistance is seen and focussed on those that we assist.

This said I am inviting members to contribute to the subject: **Looking back ... did we miss something?**

1. Are there practices that rural communities had that have been discarded that would have assisted in achieving a greater effect on poverty and hunger?

2. Is there evidence of communities blending 'traditional' production and livelihood systems with modern practise that has shown some success?

3. Any literature on the subject will also be much appreciated.

Many thanks in advance for your inputs.

Walter Mwasaa
CARE International

III. LIST OF CONTRIBUTIONS

Contribution by Falana Adetunji from the Federal Ministry of Health, Nigeria

Dear Walter,

Thank a lot for this tough provoking topic.

There is no doubt that food production in the rural community during the past years is far better than now.

There are various reasons why the current production level cannot meet the prevailing demand in the once self sufficient community.

First is the issue of education on the appropriate use of this modern equipment that has replaced the old method of farming or better still Food production. Most of the current methodologies employed by the present farmers are far apart from their knowledge; therefore, there is need for continuous capacity building towards sustainable skill acquisition, retention, utilization and sustainability.

Secondly, the sudden increase in the population of the rural communities does not go in conformity with land availability per Household that can sustain or guarantee enough food production. Even where there is enough land, the distribution parameter is most of the time defective therefore denying household that would need bigger land for food production and sustainability the opportunity

Thirdly, the issue of storage is significant if the era of sufficient food production as witness during effective rural practices is to be revisited and improved upon. Storage is very vital, but the food production is not matched with the storage facilities and methodologies that exist in the rural communities. Thus most of the food gets spoiled leading to wastage and sporadic hunger in these communities.

Other factors such as Government policies in all ramifications play a vital role in the current retrogressing trend being experienced in these rural communities concerning food production.

Going back to Walter's question: "**Looking back to effective rural practices... did we miss something?**", I believe that we did not and we are not missing anything except that we lack proper planning and thinking ahead for future challenges which in the ultimate is survival.

Falana Adetunji. O
Nutrition Officer
Federal Ministry of Health
Abuja, Nigeria

Contribution by Muhammad Shoaib Ahmedani from the PMAS Arid Agriculture University, Pakistan

Dear Walter Mwasaa and other colleagues,

The questions raised by Mr Walter are thought, provoking and reflect a pain and desire to improve the status of rural communities. His questions are repeated as under with possible answers.

1. Are there practices that rural communities had that have been discarded that would have assisted in achieving a greater effect on poverty and hunger?

Yes there are many customs, values, moral obligations, cultural bindings and religious teachings which we have almost discarded. A few decades ago there had been a situation where peoples used to take care of their neighbours before dinner and lunches. At the eve of Christmas, Eid and Holy festivals, the poor were specially cared by the rich. There had been competition among the rich classes for generosity and charity instead of lust for wealth which we see today everywhere in the globe.

2. Is there evidence of communities blending 'traditional' production and livelihood systems with modern practise that has shown some success?

Modern practices, if blended with traditional customs may yield an optimum level of production and livelihood. The best examples may be taken from China and Japan where per capita income and industrial growth rate is high. This is because they abolished the traditions which were letting the nations down and they adopted modern practices which resulted in improvement of the entire nation. But while abolishing the traditions and adopting modern practices; these nations did so solely for the welfare of the humanity irrespective of profit or material gain.

3. Any literature on the subject will also be much appreciated.
Many thanks in advance for your inputs.

A Concise History of China,

US history;

Japanese history & culture from ancient to modern times by John W. Dower and Timothy S. George;

The Japanese Experience: A Short History of Japan by W. G. Beasley

I am confident that if we change our traditions for the welfare of humanity and adopt modern practices just to facilitate the humanity and ease the social system, we can improve the status of rural communities throughout the globe. But we are missing a most important factor "Humanity" and have adopted the modern approach "profitability". Due to this reason our rural communities are facing problems.

Dr Muhammad Shoaib Ahmedani,
Deputy Director Quality Enhancement Cell,
PMAS Arid Agriculture University, Rawalpidni.

Contribution by Edward Mutandwa from the Rwanda Development Agency, Rwanda

Dear All

I would like to contribute to this interesting and important topic on the traditional practices-food security and poverty nexus raised by Walter. Firstly, it is clear that traditional practices or indigenous knowledge systems have been systematically precluded from mainstream development arguments. This is mainly due the nature of agricultural extension system, which in most countries, is based on models developed in advanced economies. Historically, our ancestors had their own methods of production, their own ways of storing harvest, their unique ways of treating livestock diseases. But with the advent of colonialism, new methods of production were introduced for example through the Green Revolution African natives adopted hybrid crops and improved livestock breeds and this eroded the reliance on this form of knowledge.

However, in recent years, a number of studies on traditional practices have been done. This interest has largely emanated from the fact that some people from the developed world have seen the prudence of some of our indigenous practices.

I can refer to those by (Flavier, et al, 1995, Warren, 1991, Kolawole, 2001, Maikhuri, et al, 1999, Gadzirayi et al (2007), FAO (1988); Goode (1989) and Rubaihayo (1994). These studies delved on the efficacy of traditional practices in areas of post harvest crop management, livestock disease management, crop husbandry. Examples of such techniques include the use of maize cob powder in storing maize harvest, use of ash in storing sweet potatoes, use of tephrosia to control ticks in livestock, use of traditional knowledge to preserve wetlands, forests etc. All these practices have a bearing on food security and poverty reduction because without access to modern extension these methods are serious alternatives to the achievement of household outcomes. Personally, I conducted research on how some of the aforementioned areas. I have seen that it might be necessary to blend traditional knowledge and modern methods.

So, to answer your question, I think that the problem is structural i.e. it is influenced by the structures created to transmit new methods and also the processes. If it could be possible to re-adjust this system, then localized methods could be appreciated starting at the policy level. If you need more data and success stories on traditional methods of production, I will contribute to this initiative.

Edward Mutandwa
RDA, Rwanda

Contribution by Chris Ramezanpour from the USA

Dear all,

In my personal experience we are indeed missing something. There are many pieces to the puzzle of sustainable agriculture development, including the elements highlighted by Falana Adetunji- education/training, population increase, storage and policy. One important piece that is overlooked is flexibility in thinking. By this I mean a fixation on one course of action or one model for solving the problem. The most basic evidence of this is the focus of food production as the solution to rural hunger and poverty. While this course of action is definitely important, it is by no means the only one. The risk is that by overemphasizing staple food production programs we overlook other more lucrative, and sustainable farm-based opportunities that can help rural communities thrive.

I am perhaps playing the role of devil's advocate here, but let me challenge a bit of the thinking about simple food production solutions. First, there is the argument that Falana Adetunji made - increases in rural population exceed the productive capacity of the land to grow enough staple food to feed the expanding family. Another threat is that simply giving seed and fertilizer to farmers to grow more maize, casava etc. does not prepare them as entrepreneurs to take full advantage of the opportunities there land has to offer. It simply instils in them the common pattern of thinking of subsistence farmers around the world - i.e. Grow what you eat.

Obviously there are other, potentially more lucrative farming enterprises - like cash crops, fruit trees, nut trees, high-value vegetables for local or regional markets, bee keeping, livestock, agro-processing, etc. But these require a policy agenda that is more expansive, and flexible than imagining the solution to the woes of the small-scal African farmer to rest in the logic of simply increasing starch yields per acre. People speak admirably of India's Green Revolution, and rightfully so, but there are still hundreds of millions of rural Indians living in abject poverty, despite the increase in rice production.

As Falana mentions, training and capacity building are key methods for preparing farmers to recognize and take advantage of the natural endowment of their land. But beyond this training element there is another component - providing them with a way to overcome an instinctive risk

aversion born from living hand to mouth. That is not to say that they should be brainwashed into taking gross and excessive risks with their land or savings (if they have any); but that they should be provided with the chance - by donors, government, lenders, etc. - to take moderate risks that can deliver big rewards for themselves and their families, and at the same time build in them the confidence to try new alternatives on the farm beyond the grow what you eat pattern of rural poverty. And in programming design for this kind of effort, donors, governments, NGOs and lenders need to build a characteristic of flexibility into the system, so that a farmer who borrows and does not succeed the first time does not get too discouraged, but rather learns from her mistake and tries again, all the more wise, the next time around.

I am sure the system varies by context, but I have heard from colleagues that in Kenya during the time of colonialism, the British forbid Kenyan farmers from growing cash crops since it would compete with the British farmers in Kenya who were doing so. Instead, the Kenyan farmer was forced, sometimes brutally so, to grow what is now the national staple, maize. This psychology has been passed down from one generation to the next. So in some instances part of history contributed to the problem and does not hold the answers. Of course, this is only one case, and there are many others, as with local indigenous vegetables, and ancient forms of water harvesting that do hold a key to unlocking opportunities on the modern farm. But again we can see where flexibility, this time of a mindset, is needed to help farmers break from the relics of a previous model, while at the same time embrace the wisdom of their original culture and insight.

Lastly, I would just add one more point to flexibility, this time in terms of local schools. In the past, the village school was a center for information for all people, not just kids. It was a community resource of sorts that could be a helpful model today for supporting local agriculture development initiatives - providing market information, crop training tools, discussion forums, etc. In light of the fact that only a small fraction of children in many African countries will advance beyond primary school, but will remain on the farm in which they were raised, the school would also be a great place to begin providing youth/the next-generation of farmers with important skills and information in agriculture and agribusiness to help them create, discover and act on rural-based livelihood opportunities.

Chris Ramezanpour
Cambridge, MA

Contribution by Mahtab S. Bamji from the Dangoria Charitable Trust, India

Dear Colleagues

High input monoculture agriculture that characterised the green revolution did help to increase production of fine cereals in India, but pulses (legumes) and nutritious millets languished. Consumption of pulse which is the major source of protein in vegetarian diets has come down. Millets have become orphan crops, though the rich have started eating them in small quantities as health foods. Green revolution has ushered in environmental problems and hence traditional methods need to be revisited and internalised to the extent possible. Though India ranks 1st and 2nd in milk and horticulture production, intake of these foods by the poor including the producer has come down. Agriculture should have nutrition orientation and should be sustainable using a judicious use of green methods with chemical fertilisers if needed. To increase household access to food, homestead production should be encouraged, particularly production of income-elastic foods like vegetables, fruits, poultry, dairy, fisheries etc. Agriculture is tending to become more and more income and export oriented forgetting its basic purpose- food security at household level. Agriculture for income and export can go side by side with agriculture for household food security.

Mahtab S. Bamji

INSA Honorary Scientist,

Contribution by Andrew MacMillan from Italy

Friends,

I suppose that much of the problem with so-called “modern” farming methods is that they have been developed with the main aim of maximizing productivity and income on large-scale farms. In the most general terms, they tend to encourage specialization rather than diversity, heavy dependence on purchased inputs, the production of large quantities of standardized outputs and ample use of farm machinery. The assumption seems to be all too often made that what is good for the large-scale farmer must also be good for small-holders, and hence one often sees extension services promoting the same “modern” approaches, regardless of farm size.

For many small-scale farmers, limiting exposure to risk is quite as important as maximizing income. This implies favouring diversification over income maximization – and has led to the emergence of many different intensive inter-cropping systems (such as the multistorey gardens of Java, Sri Lanka and the Caribbean islands), relay cropping (as in Lesotho’s Machobane system) or “rice-fish” in Bangladesh. These combinations typically yield greater aggregate benefits than most mono-cropping systems, and, at the same time, reduce risk exposure.. The quest for risk limitation leads, too, to a tendency to minimize dependence on external inputs because cash is in short supply and hence has a high “opportunity costs”. The value placed upon labour in a small-holder family may also be below current wage rates, and so, for instance, it may make sense to look to hand weeding rather than use of herbicides or removing the egg masses of potential pests from crops by hand rather than buying insecticides and to spend time in composting or collecting and applying animal manure rather than spending money to buy fertilizers.

What I am implying is that there are huge opportunities for the modernization of small-scale farming but they have to come, not so much from the scaling down of technologies developed for large-scale farming, but from seeing what is likely to be best through the eyes and value systems of small scale farmers.

Andrew

Contribution by Kevin Gallagher from FAO, Sierra Leone

Perhaps post-conflict countries are a special case but there are some dynamics related to this discussion topic I would like to note.

1. Many farmers become dependent on hand-out in emergency and rehabilitation phases and loose some of the previous practices such as seed care. In Sierra Leone, we have met farmers that even say “We didn’t plant rice this year because no one gave us the seed”. In response, FAO and Ministry of Ag have started a campaign to encourage farmers to save their rice seeds.

2. In the cocoa area, many farmers were displaced for long periods. Traditional knowledge was not handed from generation to generation such that younger farmers are not able to manage farms (clearing undergrowth, pruning, fermenting, drying). After several years away from a farm, there is a need to rehabilitate the plants – tropical growth is fast such that farms are over-grown and plants in bad shape after no regular pruning. In response, FAO, Ministry of Ag and farmer cooperatives are running Farmer Field Schools for cocoa farmers.

3. The conflict of 10 years meant that many farmers did not have an opportunity to study – and now are not able to do basic math or literacy. This change means that some institutional and media functions are not working well. Community radio has become important for learning yet there are not many learning programmes for farmers.

Best regards,
Kevin Gallagher
Sierra Leone

Contribution by Joseph Opio-Odongo from the Sustainable Development Services, Uganda

Dear Colleagues,

I salute Walter for raising an interesting and complex issue.

Interesting, because of the belated recognition that modernists have given to the merits of some of the traditional practices in sustaining the livelihood of rural people.

Complex, because in providing credible answers to the questions posed one needs to take sufficient account of changing circumstances that determine the relative effectiveness of a practice in fighting both hunger and poverty.

Here my brief answers to the first two questions raised by Walter:

1. Are there practices that rural communities had that have been discarded that would have assisted in achieving a greater effect on poverty and hunger?

Yes, one can find a number of such practices in nearly every rural community in Africa, for instance. One also would recognize that a number of such practices have been voluntarily discarded or abandoned because of misguided advice, raw chauvinism, or legislative fiat. At the same time one would be naive in assuming the effectiveness of such practices would be insensitive to changes in circumstances that influence the livelihoods of rural people (technology, politics, economy, commerce, and so on). A concrete example from my rural community is the food banks at the community and sub-county levels in the 1950s that were relatively effective in ensuring food security in the colonial period. That effectiveness however was underpinned by administrative fiat. A combination of chauvinistic politics, relatively favourable climatic conditions in the 1960s and the promotion of cassava as a famine crop resulted in the abandonment of the food banks. However, even if the practice were continued to date, its effectiveness would be questionable because of a number of reasons including: widespread theft in the rural community; increasing incidences of corruption, increased vulnerability to climate variability that has affected the availability of the food that would have supplied the bank; and changing cropping patterns and food preferences.

2. Is there evidence of communities blending 'traditional' production and livelihood systems with modern practise that has shown some success?

Here too, one can find the traditional-modern blends in any community as it struggles to deal with the vagaries of rural life. In the area of pest management, for example, there is an interesting combination of traditional and modern practices across Africa, Our research in the early 1980s in southern Uganda, for example, revealed such a blending. The research results did confirm that in instances where farmers did not want to use their little incomes to purchase modern insecticides, they used traditional post-harvest storage methods to effectively control storage pests. Our lab tests also did confirm that the viability of the maize and bean seeds, so stored, was not adversely affected.

However, if we were to repeat the research in the same communities now, we would most likely find that the practice has been voluntarily abandoned by some of farmers and for justifiable reasons. Changes in crop variety, introduction of new pests through imports of food grains and changes in rural housing could emerge as some of the reasons.

The main message here is that while looking back can be instructive, we need to avoid being nostalgic about it.

Joseph Opio-Odongo

Contribution by Paul Scherzer from E&D Consulting Services, South Africa

Dear Colleagues

I agree with many of the contributions made on this topic thus far. I believe effective rural agricultural principles, such as traditional crop diversification and risk management strategies, were overlooked in the past due to the focus on profitable mono-cropping and this has resulted in communities often losing their parent's knowledge of these techniques.

However, what I believe is missing more than the knowledge of these techniques, which are generally known or recorded, is the ability for donors and funders to implement them. The key problem from my experience is that it is difficult to spend large amounts of money on traditional practices i.e. promoting seed saving, little reliance on technology, diversification of traditional crops, use of family labour and hand-held tools etc. So whilst a programme may start with good intentions of promoting small-holder farmers and household food security, when the donor or Government Department starts to come under pressure to spend their budgets and show results the programme falls back into practices which started the problem such as expensive infrastructure and machinery, larger plots, reliance on mono-crops.

I think this topic 'did we miss something' will not be complete if we do not look at the way 'we' (policy makers, funders, implementers) need to show the results of our work, which is usually in terms of budget spent, areas planted, yields achieved etc. A rural food security programme with a fraction of the budget relying on training and skill provision, few free handouts, and implemented over a number of years will most likely yield better results. But we often miss this because the money must be allocated and spent in a shorter timeframe.

Paul Scherzer, South Africa

Contribution by Asad Naqvi from UNEP, Switzerland

Dear Colleagues

Thank you very much for providing an opportunity to share some ideas on this subject. Please find below a brief response. I will be happy to provide more information and references as and when needed.

1. Are there practices that rural communities had that have been discarded that would have assisted in achieving a greater dent on poverty and hunger?

Yes indeed there are. One way of approaching this question is by analysing a lot of practises associated with different types of sustainable agriculture such as organic agriculture (OA). OA represent a re-claiming and up-dating of older practices by combining traditional and scientific knowledge. Sustainable agriculture refers to various philosophies, ideologies and practices that have emerged, in part, as a response to "modern" agricultural practices whose effects on a wide range of social, environmental and economic indicators not least poverty and hunger, are viewed as negative. That is why the International Assessment of Agricultural Knowledge, Science and Technology came up with a clear message that "The way the world grows its food will have to change radically to better serve the poor and hungry if the world is to cope with a growing

population and climate change while avoiding social breakdown and environmental collapse". World is now looking at different farming practices associated with sustainable agriculture as a solution to address poverty, hunger and many other social-environmental woes. Here are some examples of the traditional farming practices that are part of the modern organic agriculture:

- Practices such as inter-cropping, use of traditional crop varieties that were suitable for local soils and climatic conditions, and crop and animal rotation not only help build soil fertility, and soil and sub-soil biodiversity but also ensure sustainable supply of food and income.
- Like "older" practices, sustainable agriculture emphasises making the most use of available resources on the farm and nearby before resorting to external inputs. For example, farmers who usually keep livestock and also grow crops, make use of manure from livestock to fertilise the land instead of purchasing synthetic fertilisers.
- Another very important feature of organic agriculture which is similar to earlier practises is greater community cooperation in all aspects of farming: planting, harvesting, solving common challenges and even celebrating. This is helping rebuild fraying social ties in rural areas in many parts of the world.

2. Is there evidence of communities blending 'traditional' production and livelihood systems with modern practise that has shown some success?

Yes there is a lot of evidence in these regards. Organic agriculture is defined as a holistic production system based on active agro-ecosystem management rather than on external inputs that utilizes both traditional and scientific knowledge. Here are some examples of the success of organic agriculture:

- Organic products fetch high price premiums, resulting in more income for farmers and others in the supply chain. For example, in Uganda farmers are earning up to 180 per cent more on their organic ginger compared to the conventionally produced. This is just one example and there are many more. This is transforming the lives of farmers in small but meaningful ways. For example, they are able to offer their children better lives since they can now afford to send them to school, pay for their health care and provide food.
- A joint UNEP-UNCTAD study analysing 114 cases, shows that productivity on small and medium size farms in Kenya, Tanzania and Uganda has doubled after shifting their production to organic or near-organic methods (see below for references).
- Sustainable agricultural practices also create more employment opportunities. This character helped Mexico in 2007 to create an additional 178,000 jobs by converting some of its agricultural production to organic farming.
- Carbon Dioxide emissions per hectare of organic agriculture systems are 48 to 60 per cent lower, energy efficiency of production is 30-70 percent higher, and carbon sequestering is 3-8 tonnes more compared to conventional forms of farming.
- Sustainably-managed lands around the world maintain higher and more sustainable soil fertility compared to other systems. They also produce yields that, depending on a range of factors, can be equivalent to, or higher than, conventional farming systems;
- There is much more and powerful evidence of sustainable agricultural practises helping communities meet their needs in ways that steward the environment. In fact, I have to stop myself from providing more details. I, however, invite you to review some of the references below and also contact us for more information.

3. Any literature on the subject will also be much appreciated.

Below a very small sample of a huge body of literature:

- United Nations Environment Programme and United Nations Conference on Trade and Development. 2008, 'Organic Agriculture and Food Security in Africa,' Geneva & New York: United Nations
- W. M. Denevan, "Prehistoric Agricultural Methods as Models for Sustainability," *Advanced Plant Pathology* 11 (1995): 21-43
- Food and Agriculture Organisation of the United Nations 3-5 May 2007, 'International conference on organic agriculture and food security,' Available at http://www.fao.org/organicag/ofs/index_en.htm
- Altieri, M., and S. B. Hecht, eds. 1990. *Agroecology and Small Farm Development*. CRC Press, Boca Raton, FL
- Conway, G. R., and E. B. Barbier. 1988. After the green revolution:sustainable and equitable agricultural development. *Futures* 20:651-678.
- Johnson M.-F. J. November 2007, 'Agricultural opportunities to mitigate greenhouse gas emissions,' *Environmental Pollution*, vol. 150, iss. 1, pp. 107-124
- Numerous publications on Organic Agriculture by the Food and Agriculture Organisation of the United Nations available at <http://www.fao.org/organicag/oa-publications/en/>
- Jules Pretty. *The Earthscan Reader in Sustainable Agriculture*. 2005
- University of Cambridge, 2002, 'Economic Evaluation of the Organic Farming Scheme,' Final report to the Department for Environment, Food and Rural Affairs, Centre for Rural Economics Research, Department of Land Economy.

Best regards

Asad

Contribution by Bhubaneswor Dhakal from New Zealand

Dear Colleagues

1. Are there practices that rural communities had that have been discarded that would have assisted in achieving a greater effect on poverty and hunger?

I am a resource economist with some experience of rural livelihoods opportunities in developing countries. I had studied problems of declining traditional land use practices which could hedge against hunger and rural poverty in Nepal. The finding is relevant to be shared here. In the Himalayan region, rural people have very small landholdings (average size is about 0.5-0.8 ha) and poor households are almost landless. The landholding of high hill people is even smaller and they frequently suffer from hunger. In the civilization process, the mountain communities settled and farmed in environmentally safe pocket areas and kept forest in marginal/ environmentally sensitive areas. Forest and pastureland was the same land and communal. In that time they could complement private land resources by forest resources to sustain their livelihoods. In Nepal's almost 8% of land is covered by alpine pasture which can be used only in summer season. Traditionally high hill people practiced transhumance (mobile) livestock farming

practices and used the alpine resources during summer. During winter they had access to forests for grazing.

Now environmental development agencies have advised communities and provided support to restrict grazing in those forests. Many people know that livestock are the “engine and inspiration” of mountain people. Sustaining livestock is not possible for many poor households without getting resources from forests particularly in critical shortage seasons. International aid agencies and policy makers intentionally (to offset green house emission of developed countries) introduced policy to restrict grazing and reduce livestock of rural people. For example Master Plan (1988, p. 148) prepared with technical advised from Asian Development Bank and World Bank clearly stated a policy strategy of “reducing and controlling livestock numbers” (Master Plan 1988, p. 148) to the extent manageable on resources of private lands. Many development agencies (bilateral and multilateral) funded and provided technical support to Nepal’s government for planting pine trees in community pastureland for poverty alleviation and fulfillment of basic need of rural poor people. In addition, the government introduced a Leasehold Forestry Programme to increase forest cover in community pasturelands where forestation was ineffective from a community forestry approach alone. Wildlife protection areas were extended, largely in community pasturelands (Müller-Böker and Kollmair, 2000). Recently the World Bank has funded the government to intensify forestry activities for further restriction in forest uses and trade the carbon to offset green house emission of developed countries. Development professionals are very please to get the vested interest development support. Now rural people have lost their livestock business on one side and forest resources are underutilized on the other side. The impact is higher in remote areas. Farming land abandonment has been increased in rural areas due to increased fertilizer price and reduced farm manure production. The main reason for declining rural livestock business is decreasing access to forest resources. On the other hand people are suffering from hunger. Some of you might have heard recent news of Nepal that more than 400 Nepalese people died from epidemic diarrhea last month which is identified due to eating very poor quality food (not suitable to feed even animals) by the World Food Programme. The government has formed commission to investigate the scandal on 3rd September 2009. In this hunger area, farming land abandonment has been increased and large forest resources are underutilized/wastage.

2. Is there evidence of communities blending 'traditional' production and livelihood systems with modern practice that has shown some success?

There are enormous potentials of blending 'traditional' production and livelihood systems with modern practice. However rural people cannot revive the traditional institutions. Environmentalism induced by vested groups has made the rural communities powerless to understand the value of the practices and organize to use them. Professional groups should play critical role to liberate society from the oppressive state. But the professions of Nepal are trapped in financial incentives by the vested agencies and their conservative professional value so they have been used to oppress the poor people. The groups are not serious about the lives of those dead people and sensitive situation of the country so it is not possible to make use of the practices.

3. Any literature on the subject will also be much appreciated. I advise you to read the following literatures.

- Edmonds, E. 2003. Development assistance and the construction of government-initiated community institutions. *Economic Development and Cultural Change*. 51(4), 897-930.
- Hausler, S. 1993. Community forestry: a critical assessment: the case of Nepal. *The Ecologist* 23(3), 84-91.
- Helvetas. 2009. Promoting Food Self-Sufficiency in the Mid-hills of Nepal: Fertilisers or Farmyard Manure? Mountain Forum Bulletin. <http://www.mtnforum.org/rs/ol/browse.cfm?tp=vd&docid=3644>

- Ives, J & Messerli, B. 1989. The Himalayan Dilemma Reconciling
- Development and Conservation. The United Nations University and Routledge, London & New York.

Thank you.

B. Dhakal

Contribution by George Kent from the University of Hawaii, USA

It might be useful to build on Chris Ramezanpour's excellent observations by pushing them a bit further.

He begins by referring to "the puzzle of sustainable agricultural development." A bit later he speaks about the need to find a solution to rural hunger and poverty. Then he says, "we overlook other more lucrative, and sustainable farm-based opportunities." These are all important concerns, but they are a bit different.

I agree that rather than being creatures of habit, people should try to expand their vision about what is possible. If the primary concern is rural hunger and poverty, one should explore all possibilities for productive work in that setting.

Any means of earning money should be considered, not just farm-based opportunities. There are possibilities for non-farming entrepreneurship in rural areas as well as urban areas.

Hunger is usually due to a shortage of money, not a shortage of food supplies. Where there is money, food shows up.

Aloha, George

Contribution by Walter Mwasaa from CARE International, Sierra Leone

Thank you forum colleagues for the invaluable contributions you have made to this issue it is overwhelming to see the wealth of experience the forum has.

Kent, Falana, Chris and others raise important issues on structures, incomes and environment. I am however still at a loss, have we assumed that the local systems could adopt, compete and thrive in a competitive world.....

Organic farming was brought up as an example; there is a lot debate around cash cropping at the expense of food crops. Rural communities are attracted to the big money, but with failing rains and all the investments are equally great so that the net return is no longer sufficient to purchase sufficient food (which is now largely imported as local production shifts to cash crops). More recently bio-fuels are taking up huge farms reducing global food crop availability leading to increased prices.

Complex as it may be, there is still the rural farmer in a remote village in Kenya/India/Sierra Leone, name it... how do we get him/her enough food and extra cash to send children to school and buy medicine for the household when one is not well? What can we do ... or should we have done for this rural folks?

Contribution by Kioko Munyao from World Vision Canada

Dear All

Having spent a large part of my working life working with Drylands communities, especially pastoralists, these are questions that I grappled with and debated with colleagues long into the nights while camping out in the field in northern Kenya. I will attempt to address the questions as relates mostly to pastoralist communities though the answers are also very context specific.

1. Are there practices that rural communities had that have been discarded that would have assisted in achieving a greater effect on poverty and hunger?

One practice that is progressively being discarded and that has a major role in achieving greater effect on poverty and hunger is the reduced mobility of pastoralists due to many factors including national and regional boundaries; wildlife conservation, increased sedenterisation and pastoralist drop out driven by the desire to modernize pastoralist communities etc.

The traditional nomadic pastoralist livelihood system in northern Kenya as well as in regions of the surrounding countries bordering northern Kenya i.e. Ethiopia, Sudan and Somalia depended on open boundaries and seasonal use of various pasture and water points. Traditional pastoralist production systems typically cover large areas of relatively unproductive dry lands, as well as smaller, relatively well endowed areas. It is the use of these latter wetter areas to sustain the herds through critical periods that allows pastoralists to make use of the extensive dry lands the rest of the year. Efficient use of the dry lands depends on pastoralists' ability to move herds between and across these two landscapes. Mobility and a relatively non-intensive use of the available better endowed land are necessary in order to make any use at all of poorer land. If these most productive lands are the first to be converted to farmland or set aside for conservation as happens in Kenya mobility is curtailed and this confines pastoralists to fragile, low potential range lands throughout the year, leading to deprivation and environmental degradation. The increasing encroachment by crop farming into the marginal farming areas unsuitable for crop production combined with settlement around permanent water points and other social and health amenities has drastically reduced the mobility of most pastoralists as well increasing conflict with crop farmers and thus effectively making pastoralism less sustainable.

The dilemma in this comes also from the changing trend especially the education system which has little relevance to the pastoralist context and in some instances actually contradicts the essence of pastoralism. I met many disillusioned pastoralist youths who had only reached high school and were thus unable to fit either within their community or the larger economy outside their communities. The high school education they received in a way removed them from their pastoralist lifestyle but was not adequate to transform them out of it altogether and thus they were caught in between. Mobility to date still remains one of the most effective survival strategy for pastoralists and their livestock but the reduce scope for mobility brought about by grazing boundaries imposed during the colonial time through creation of districts and national parks has over the years adversely affected pastoralist communities.

On the part of Drylands marginal farming communities, the high plant bio diversity both (intra and inter species) they maintained was a great insurance during droughts and other natural calamities. Working in the Drylands of Eastern Kenya, I came across community members mostly the elderly that cultivated between 5 to 12 varieties of sorghum and similarly for other dry land crops like pigeon peas, cow peas, green grams and millets.

The maintenance of this high plant diversity has over the years been eroded by various factors including the interventions of government, development agencies especially with respect to relief seed distribution which in most cases tried to introduce varieties that were either unsuitable for the areas or that reduced the available plant diversity setting them up for failure in the future. In addition the changing food preferences driven by new crops especially maize in such areas has lead to a reduction in the production of drought tolerant crops like sorghum, cassava, cow peas etc and replacement with less drought tolerant crops like maize.

2. Is there evidence of communities blending 'traditional' production and livelihood systems with modern practice that has shown some success?

Again focussing on the pastoralist communities, the blending of traditional Ethno-Veterinary knowledge and modern animal health practices is one area that has shown some success especially in areas that are under served by government and private animal health service. The training of community animal health workers combining both traditional ethno veterinary knowledge and modern animal health practices is an area that has shown some promise. In this case also use of traditional animal disease surveillance systems can augment government efforts on disease surveillance and blending these together has potential for improving the disease surveillance in hard to reach areas.

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