

PROCEEDINGS OF THE FSN FORUM DISCUSSION No. 49
FOOD SECURITY OF WOMEN FARMERS IN THE CONTEXT OF CLIMATE CHANGE
FROM 2 DECEMBER TO 11 JANUARY 2010

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INTRODUCTION OF THE TOPIC

I am Kanchan Lama, Coordinator of Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN) in Nepal.

[WOCAN](#) is a global network of professional women and men working for promoting women's rights and leadership in agriculture and natural resources management at all levels.

In developing countries like Nepal, due to migration of men, rural women are often left alone to take care not only of the usual household chores but also to deal with market, technology and public services besides the normal agricultural production part.

Further to the socio-economic problems encountered by these women, climate change applies further strain on their food security which is quite alarming.

As an effect of irregular and uncertain climatic conditions, these farmers have been facing adverse situation created by draught, untimely or heavy rain, hail storm, flood, landslide, etc.

There is increased hardship for women farmers now in terms of food insecurity besides increased demand for labour and time. The negative effects of climate change have been increasing. The United Nations Climate Change Conference in Copenhagen ([UNFCCC](#)), the United Nations Forum on Forests ([UNFF](#)), the World Summit on Food Security ([WSFS](#)) types of conferences have been discussing about these issues. However the advocates on women's rights to food security, related services and negotiations have often faced a very passive environment during the policy negotiation processes. The fight is going on, with greater hope that the attention and commitments of the agriculture, food security policy makers will be more pro-active for the cause of addressing the issues on women farmers' benefits.

In this connection, I wish to raise a few questions:

- **How long will it take to demystify the issues of climate change and inform the women farmers about the alternative ways for ensuring sufficient and good quality food at household level?**
- **How can the farmers make the public services more accountable for providing prompt services for appropriate technologies?**
- **Why can't the donors and the public service agencies make it a priority to address the issues of women and food security in a different way?**
- **Do civil society organisations have the necessary scope and independence to educate the farmers to adapt food production and consumption to such diverse climatic condition?**
- **What role should the governments of developing countries play to minimize the risks of climate change and promote adaptation of the local communities as an immediate solution?**

Thanks

Kanchan Lama
WOCAN

LIST OF CONTRIBUTIONS

KV Peter from India

History of Agriculture reveals that it is women who started collecting seeds, sowing seeds, watering plants and ultimately harvesting and storing grains. They are the conservators of biodiversity. Large scale mechanised farming brought men to farming. Now with migration of men to cities for better remunerative avenues, agriculture is getting feminised with more women in farming. Ergonomically designed farm equipments are transforming operations to become friendly to women. Self help groups of women are transforming Indian agriculture in states like Kerala. Days are not far off when world agriculture is dominated by women. Precisely history is being repeated.

K V Peter

David O. Ojo from the National Horticultural Research Institute, Nigeria

Great.

This was one of the subjects suggested in the FAO sub meeting during the Kenya, Nairobi All African Horticultural Congress. The role of women, especially in Africa, in combating climate changes through horticultural productivity is great and I propose it should take priorities of development authority partners locally, nationally, and globally. From experience, vegetables are lucrative especially the exotic ones with short duration turn over, which the majority of women are involved in.

Moreover, women are engaged in ornamental and medicinal plants, horticultural crops, spices etc. which I would like to share with the audience for possible collaboration.

Bye for now.

With courtesy.

Dr. David O. Ojo,
NIHORT,
Ibadan, Nigeria.

Denis Drechsler from FAO, Italy

Dear All

For a general overview on this interesting topic you might want to have a look at the FAO Policy Brief **Women and Rural Employment *Fighting Poverty by Redefining Gender Roles***. The Brief gives a good insight into the gender roles in rural economies.

You can access the paper here: <ftp://ftp.fao.org/docrep/fao/012/ak485e/ak485e00.pdf>

Best regards

Denis

Max Blanck from FAO, Italy

Dear all, this FAO document advocates the need for climate financing mechanisms to target agriculture to accelerate mitigation and adaptation action. Even though it does not tackle the gender element directly it provides valuable background information on the importance of agriculture in the climate change discourse.

<http://ftp.fao.org/docrep/fao/012/ak914e/ak914e00.pdf>

Best Regards

Max

Maria van Heemstra from the World Council of Churches, Switzerland

As a general comment I find these questions somewhat condescending, as if women farmers were at a total loss when it comes to adapting to climate change. Women have always had to adapt to changing conditions and difficult circumstances, be these climate change, economic crises or discrimination. As K.V. Peter says, women are at the very basis of agriculture and the development of plant varieties since the beginnings of agriculture; in indigenous and peasant communities women continue to maintain and develop seeds. There are numerous success stories of women in agriculture and rural development (see as an example: <http://www.woman.ch/june09/women/1-introduction.php>). What such women need is recognition (equal rights with men) and support (credits, education, access to land etc.) as indicated in the document mentioned by Denis Drechsler.

*** How long will it take to demystify the issues of climate change and inform the women farmers about the alternative ways for ensuring sufficient and good quality food at household level?**

I do not understand this question about "demystifying climate change". No one knows for sure how exactly climate change will affect specific regions and crops although there are definite general tendencies (flooding of certain areas, more drought in others, rising sea levels, more extremes, more violent storms, melting of the permafrost etc.). Just as having a healthy body will help us resist disease, having a healthy soils and ecosystems will help crops resist the vagaries of climate change. This boils down to practicing organic agriculture, which has been recognized even by UNEP and the EU as being the best way to fight climate change. The question is how long will it take male-dominated governments and power structures to give women, who make up more than half the population on earth, access to education, finance, land rights, and particularly decision making positions etc. in proportion with their population? Despite the urgency of the energy and climate crisis, male-dominated governments continue to pour billions of dollars in war, weapons, and the private sector supports activities that consume excessive use of fuels, such as car races, international soccer games etc. This is without mentioning the illicit and covert activities including women trafficking and sexual exploitation.

*** How can the farmers make the public services more accountable for providing prompt services for appropriate technologies?**

Society as a whole should take responsibility for demanding equal access of women farmers to the resources they need, as under the present circumstances it is difficult for them to demand these by themselves. For obvious reasons (who will produce the food then and take care of the children?) women farmers cannot go on strike like organized trade unions.

*** Why can't the donors and the public service agencies make it a priority to address the issues of women and food security in a different way?**

As explained in the FAO document mentioned by Denis Drechsler (<ftp://ftp.fao.org/docrep/fao/012/ak485e/ak485e00.pdf>), much of women's work is not taken into account in economic terms as much of the work they do is not paid; yet it is extremely important (60-80% of food production, fuel and water provision, raising children and caring for the sick and elderly, engaging in community activity). Donors and public services have to find ways to assess the contribution of women based on a different value system than "money earned", a system which assesses "life-giving" contributions. For example the paragraph on "redefining Gender roles" in the FAO document talks about "traditional norms that pre-determine women's lives as mothers and care-takers" and "prevent them from pursuing a professional career." This appears to undervalue women's role as mothers and caretakers; ways should be found to compensate women for responsibly carrying out their roles as mothers and caretakers. It is easy to say that "as women enter into paid employment, other resources need to be activated to perform women's tasks, including stronger participation of men", but who is to say these will be done as effectively by men? A major problem is that for any job women invariably are paid at a lower salary than men, both in equal positions as well as in male-dominated vs female dominated careers (teachers are less paid than plumbers etc); a survey in France that was aired on the radio today (<http://www.france-info.com/france-societe-2009-12-03-les-femmes-continuent-d-assumer-toutes-les-corvees-376391-9-12.html>) indicated that women still performed 80% of the domestic tasks (calculated to be equivalent to about 4 months of a full time job), even while holding full-time jobs, and this was further exacerbated when the couple had children. If women have to pay from their salaries for someone to do the domestic tasks, this usually ends up eating up their whole salary. What is needed is for women's salaries to be higher than those of men for the same job(s), instead of the contrary, since they are doing unpaid necessary labour at home. An added benefit to society that would ensue is that women will usually invest any extra income in their children and households rather than on themselves.

*** Do civil society organisations have the necessary scope and independence to educate the farmers to adapt food production and consumption to such diverse climatic condition?**

I believe that experienced farmers who have been tending their crops and developing seed for many years have continuously had to adapt to changing conditions. They will have noticed that the climate is changing and will adapt through their creativity and traditional knowledge. What is needed is for rural development to be made a priority so that women are not always left to their own devices in remote areas. Given access to the same opportunities as men will benefit the whole of humanity.

*** What role should the governments of developing countries play to minimize the risks of climate change and promote adaptation of the local communities as an immediate solution?**

Governments should invest in sustainable rural development together in consultation with women in a bottom-up approach.

Maria van Heemstra, PhD.
Project assistant
Justice, Diakonia and Responsibility for Creation
World Council of Churches,
Geneva, Switzerland

Response by Kanchan Lama

Dear Colleagues

Thank you very much for this discussion. Maria van Heemstra and Max Blanck ([see discussion proceedings](#)) have extended great views and pointed out to the crux of the ways for addressing the issue. As Maria opines, women farmers must be recognized as the most knowledgeable and must be consulted by Government and all other actors active in assisting rural communities. But farmer women of developing countries face a situation of being neglected and views as "secondary person" only and consultation of government does not happen with women farmers in reality. There is a serious need for establishing women farmers as the "major stakeholder" for development planning.

Thanking for contribution and hope for further debate.

Kanchan

Nidhi Tandon

FINALLY - I am so pleased that Maria van Heemstra (previous contributor; [see discussion proceedings](#)) has raised the issue of organic farming! We have been running workshops for women farmers across the Caribbean since 2004, on using information technology to network with each other and always in the context of holistic methods of farming - by which we mean organic and/or permaculture. Our last three workshops have also tackled issues of climate change. With no explanation for climate change or the abrupt shifts in weather, some of the farmers may think this is 'God's work' - and beyond the control of mere mortals. By extension, farmers might not consider themselves actors of consequence whose actions could have direct impacts for climate change and for our collective futures on this planet. In fact, nothing could be further from the truth! As Maria says, as soon as the links are drawn between organic farming and climate change, these women farmers provide all kinds of examples of the ways that they can promote healthier soils, more resilient and bio-diversity rich planting methods, and even ways to minimise hurricane destruction. In our workshops, we invite the local meteorological office whose challenges are usually how to collect data for all the micro-climates that affect these islands and countries. Some of the women farmers would be interested to build weather data recording equipment on their farms. We invite the local representative for climate risk insurance, - who usually package the insurance with other inputs for large (coffee/cotton) farmers. In Jamaica we enabled 12 organic farms to be a part of the climate risk insurance roll-out by writing to the Ministry of Agriculture. The workshop that we are about to hold in Dominica will bring in one person who will showcase the use of GPS systems in the Ministries of Agriculture in the region (which we will teach the women to access) and we also have an expert showcasing solar dryer technology. In short, as Maria says, we should not be condescending but it is our responsibility / opportunity to bring as many ideas and examples to women farmers so that they, the de facto scientists and researchers on the ground, can consider how best to adapt these. The Knowing and Growing network of women farmers is about 150 people strong, and it is a small movement of concerned and thinking farmers - and we try to run two workshops a year, with both old and new members.

We should also pay attention to the various climate change funds that are being established (like the Adaptation Fund) and consider how these might again entrench interests and NOT consider the needs and priorities of women and women farmers. If you would like any papers on the above - please let me know.

Warm regards!

Nidhi Tandon

André le Roux from South Africa

I kindly submit the following observations from my experience as being involved in the development of the first Food and Nutrition Strategy for South Africa during the late 1980's:

The role of women in rural societies has been pointed out in various food and nutrition strategies over many decades. It is usually the elder women living on communal land that are the hardest hit by aspects such as climate change, economic crises, deteriorating social and infrastructures. Apart from providing in household food security, they customarily have to take care of the young children of the able bodied relatives who migrated to the cities. As for household income, they are dependent on social pensions and allowances. The contribution by absent relatives in this regard, is usually minimal. The role of these women in food production comprise of cultivating small patches of communal land in the traditional manner, e.g. by hand or ox drawn implements. These are the women that should be targeted.

Women involved in farming in the commercial and developing agricultural sectors have adequate access to public agencies providing appropriate technology transfer, marketing and financial services.

- Climate change as a phenomenon does not have any significance to the traditional African women farmers since they are used to the harsh climatic conditions of Africa. Over many centuries they became use to years wet spells followed by years of extreme drought. It will therefore take quite a while to demystify the issues of climate change and inform the women farmers about the alternative ways for ensuring sufficient and good quality food at household level.
- Women farmers can improve their situation by forming cooperatives with neighbouring commercial and developing farmers who already have access to services for appropriate technologies such as ploughing, cultivating and harvesting. Due to the high input cost of agricultural operations, some kind of incentive for commercial and developing farmers should be considered to ensure their participation.
- In many instances, donors and the public service agencies are already addressing the issues of women and food security by promoting the establishment of food gardens. Their activities include inter alia, the training of women and children in the use of proper technologies in the establishment and maintenance of such gardens, the provision of first seeds, the marketing of surplus crops and, where necessary, the furnishing of implements. (Since the indications are that these services are more aimed at urban areas, the donors and public agencies concerned should be encouraged to also include the rural women farmers particularly in deep rural areas.)
- Civil society organisations would normally not have the necessary scope and independence to educate the farmers to adapt food production and consumption to such diverse climatic conditions. They will have to be assisted by institutions having the required technical skills and knowledge at their disposal.
- Governments of developing countries may minimize the risks of climate change by:
 - limiting the factors contributing to climate change such as coal fired power stations, burning of fossil fuels and restricting veldfires;
 - devising incentives to utilise sustainable energy sources such as sun and wind; and
 - promote the adaptation of the local communities as an immediate solution by:
 - endorsing the use of existing proven technology for the preparation and preservation of food instead of electricity and the use of fossil fuels, animal dung, crop rests and wood; (The reduction in the use of latter forms of energy sources will have further side effects, e.g. the use of dung and crop rests for the fertilisation of the soil and less trees being chopped for firewood.)
 - making such technologies affordable to needy households.

I trust that these few thoughts will be of use in this forum

André le Roux

Thilak T. Ranasinghe from Sri Lanka

Dear Members

I'd like to share my ideas as well as experiences in relation to the issue of food security of women in the context of climate change on the line of the questions raised.

Q. 1: How long will it take to demystify the issues of climate change and inform the women farmers about the alternative ways for ensuring sufficient and good quality food at household level?

In finding alternative ways to secure at least a considerable percentage good quality food in the context of rapidly changing climatic situations use of creativity of people could be taken as prime strategy as women play a role of primary decision maker at the household level. Due to the serious consequences of climate changes we need to address rural as well as urban community in taking steps related to the household food security/insecurity in national as well as global terms.

The effective use of nutritional education is a must to improve vulnerable groups as well as to minimize the misuse/overuse of "fast-food habits" in the urban, peri-urban areas and sometimes also in rural areas in the developing nations. In the utilization and popularization of simple water saving techniques, micro-level traditional know-how of seed/food processing and preservation and, vertical farming adaptations in homesteads could help to boost women involvement agriculture in the present context of food production under the environment degradation sphere: drought, floods, salinity, high humidity-cum temperature and the like.

Q. 2: How can the farmers make the public services more accountable for providing prompt services for appropriate technologies?

Initiatives towards the creation of accountability of public services could be facilitated through strategic management changes in agricultural extension, training and research institutions by creating access in integrating appropriate scientific findings with indigenous technical know-how (ITK) to yield better mix of appropriate technology for climatic consequences in the process of technology development rather than transferring of technology per se.

In consequence, household food security could be increased while valuing the role plays by rural as well as urban women at the household level. It was observed in Sri Lanka, since 2000, as the Western Provincial Department of Agriculture launched the concept of Family Business Garden [FBG] in introducing urban agriculture for peri-urban and urban communities while working with rural agricultural development initiatives in other parts. This was a challenging step against conventional thinking in agricultural production process and aimed to explore the diverse creativity available in urban societies while meeting climatic changes and advocating in contributing for household food security.

Furthermore, the concept of the Family Business Garden sits on four major goals: to convert the aspect of gardening into a theoretically based sustainable agri-business concept which provide access for economic benefits of vulnerable populations, to address some poverty issues in generating additional income with improvements in physical cum mental health standards, to work with better mix of modern science and indigenous technical know-how (ITK) towards sustainable production systems and, to make contributions for attempts of improving socio-economic-health-environment aspects of vulnerable communities. The epistemology of the concept of the FBG consists of five main components in relation to human-economic-ecological-technical premises with specific reference to the low/no space agricultural context: i.e., family nutrition, technology adoption, crop management, post-harvest technology & value-addition, and landscaping & housekeeping. For the logo of the FBG concept and some creative Vertical Cultivation Structures produced by the general public with extension personnel [see here](#).

The above different types of vertical cultivation structures were created while working with women in groups as well as the individual creativity of urban as well as rural women and youth. Thus, it

shows the readiness to harness the value of women in food security interventions by adopting management changes of delivery systems as there is an interest to become dynamic and strategic in the field of extension.

Q. 3: Why can't the donors and the public service agencies make it a priority to address the issues of women and food security in a different way?

The donor agencies and public service involvement could be established through charismatic leaders who can play a role of linker and facilitator in the process of overall development. The linking of the concept of FBG with Spanish Red Cross Society through the Sri Lanka Red Cross and ICRC as agro-psychosocial remedy after the tsunami waves and advancing the concept of FBG with RUAF Foundation provides good success stories in this regard. Moreover, women involvement and public interest placed on the concept of the FBG helped to include family nutrition and women contributions at the household food production with urban agriculture into the National Agricultural Policy in Sri Lanka in 2003 and again in 2007. This fine example can be replicated among other nations.

Q. 4: Do civil society organisations have the necessary scope and independence to educate the farmers to adapt food production and consumption to such diverse climatic condition?

More frequently, civil society groups primarily like to work on larger infrastructure projects and to expect greater outcomes at once rather than working on micro-projects as they think it may be difficult to implement at the household level. Otherwise they may bound to be within the scopes of donor agencies in implementing women friendly project work specially in producing crops under commercial agricultural goals rather than on food security in rural as well as urban development sphere. Even if they are concern on homestead sustainability, the training messages are not focused with those themes and more sensitive for commercial inputs than climate sensitive strategies.

Q. 5: What role should the governments of developing countries play to minimize the risks of climate change and promote adaptation of the local communities as an immediate solution?

The governments should be more sensitive to strategies and methods of simple/low cost household food security in promoting technology development with rural and urban communities while developing effective knowledge management systems with communities as IT facilities are available at the grassroots. It is also need to provide effective micro-loan access for household agro-entrepreneurships under long term plans.

Thanking you

Thilak T. Ranasinghe, PhD
Consultant/Advisor
[Former Director of Agriculture Western Sri Lanka]

Elly Pradervand from The Women's World Summit Foundation (WWSF), Switzerland

First let me thank you for this opportunity to participate in this discussion.

What I wish to add to the interesting discussion is that over the past 15 years, I have been almost the only defender for rural women's rights at the UN in Geneva. The Women's World Summit Foundation - WWSF continues to promote the role of rural women in agriculture, household food security and peace. Since 1994 WWSF has awarded 354 **PRIZES for women's creativity in rural life**, honouring women and women's groups around the world exhibiting exceptional creativity, courage and commitment for the improvement of the quality of life in rural communities. The Prize aims to draw international attention to the laureates' contributions to sustainable development thus generating recognition and support for their projects. By highlighting and awarding creative development models, innovations and experiences enhancing the quality of rural life, WWSF participates in addressing the eradication of rural poverty, gender mainstreaming

and women's empowerment. The profiles of all prize winners are published on our web site www.woman.ch in English, French and Spanish. The award is US\$ 1000 per laureate and US\$ 3000 for certain programs in Africa).

Another WWSF program is the **INTERNATIONAL DAY OF RURAL WOMEN - 15 OCTOBER**, which in fact is a World Day that was first launched by several international NGOs in 1995 at the Beijing conference, with the purpose of raising awareness, increase knowledge and empower rural women. The date **15 October** was chosen to create a synergy with the **FAO WORLD FOOD DAY - 16 October**. We are happy to report that in 2007 the UN declared **15 October Day a UN RESOLUTION DAY** which means that now the UN SG annually calls on all member states to mark the Intl. Day of Rural women.

WWSF has been publishing and disseminating since 1996 via its network an annual **OPEN LETTER TO RURAL WOMEN OF THE WORLD** (see web site www.woman.ch) with the aim to remind rural women and their organizations of their basic human rights as declared in numerous UN conventions and resolutions and demand from their governments to comply with their obligations. The 2009 Open Letter has as its theme: **"Claim your right to health and well-being"**. Link: <http://www.woman.ch/june09/women/2-poster.php>

Elly Pradervand
WWSF Executive Director
wwsf@wwsf.ch

Peter Steele from FAO, Cairo

Kanchan,

Nepal & Cairo; and what can governments do.

End of the day here in Cairo, and I was feeling jaded after working at the 'coal face' for most of the day. This thing about replying immediately and without giving too much thought to a well-structured response, but to simply touch base with you and to share some similarities, differences and no less important needs from one side of the world to the next. It's this thing about global warming (*literally in just about every text that crops up nowadays – and especially this week with Copenhagen in the news*) and governments everywhere being expected to do something about it. Everyone says it. But, sometimes it's not easy to use 'climate change' as the kicker. Those of us in Cairo live in one of the most densely populated centres in the world – 20 million and counting. This is a challenging city that has, for all the best of reasons, out-grown its resources; and yet continues to attract people. Thirty percent of the people in the country live in the rural sector and they are, as you can guess, the poorest people. The further from Cairo - the poorer you are. Egyptian men leave their families too, and work throughout the Gulf States. Economic downturn sees the remittances drying up and the men returning home. Egyptians sweep streets in Amman at five times the earnings for the same work in Cairo; and are pleased to get the work. But, I digress. I was shifting into the environmental disaster of the air in the city, for which we can firmly blame people, their institutions and their lack of social responsibility. To the base aerial load of particulates from heavy industry, vehicular exhaust and sand blow you get agricultural wastes burned for two months of the year – and this sits over the city as a series of inverted layers that only disperse when the wind blows. During the past two years we and our partners in government have invested >US\$400,000 in promoting technical innovation and agro-industrial novelty. Well, not such new novelty really – fibres, foods, livestock feed, compost, etc. but still the small-scale crop producers use the match as an easy route for clearing their blocks of land. And, it's illegal to burn too. We know the answers to environmental choices in this case, we know the detrimental options of doing nothing – polluted air that is dangerous to children and asthmatics; an exacerbated heat sink that demands air-conditioners that demand electricity that demands more petrol-gas and so on. None of this helps you in your beautiful hill country, but you have your excellent example of biogas production from some thousands of small digesters; we have subsidized butane that makes biogas unprofitable (*and you would always chose butane anyway –*

it's so much more convenient than managing a digester; and you can't easily make biogas in an apartment, and so on).

What can government do to make a difference to climate change in an impoverished country?

You ask. Probably, not a lot. Egypt is a relatively rich country with great potential with the people as a major asset, but >60% accept polluted city air. We have the legislation to make a difference, but fail to enforce it sufficiently. Meantime, the Mediterranean is eating away at the Delta – seawater incursion is already well inland; even if it can't be seen. Saline contaminated water is being pumped where it used to be sweet. Choices have to be made. You can't rely on over-stretched governments. People sometimes have to act on their own choice to do what is right. It's this thing about *'the environment starts with me'*; but that's easy to say and difficult to do in a short space of time. Running WOCAN as you do, why not make a point of calling round the agencies in town and see what they have to offer? See if you cannot collect, cajole and/or persuade and get some small funds that may help promote some simple technical options that people would find easy to use?

Search the FAO website and click on the 'TeleFood' icon (<http://www.fao.org/getinvolved/telefood/en/>) and see what others have done. What about a tree nursery? You can make money from that one too.

Nice to be in touch – enjoy the end of your working day.

Salute.

Peter Steele. Cairo. 08December09.

Faith Nilsson from FAO, Italy

Dear All

As I am currently doing gender research I would like to share some resources, which I believe could be interesting for our discussion.

Does gender make a difference in dealing with climate shifts? Research results from Andhra Pradesh, India, FAO

<http://www.fao.org/climatechange/19120-1-0.pdf>

Women, Gender Equality and Climate Change: The Threats of Climate Change are not Gender-Neutral, Women Watch - UN

http://www.un.org/womenwatch/feature/climate_change/

Gender, Climate Change and Agriculture, Gender CC

<http://www.gendercc.net/action/agriculture.html>

Gender implications of Climate Change from an Eco-Efficient Agriculture, PRGA Program - International Center for Tropical Agriculture (CIAT)

http://www.prgaprogram.org/descargas/gender_stakeholder_analysis/Reports/poster%20brochure%20web.pdf

Gender and climate change: mapping the linkages, Institute of Development Studies - University of Sussex

http://www.unep.org/roa/amcen/Projects_Programme/climate_change/PreCop15/Proceedings/Gender-and-climate-change/DFID_Gender_Climate_Change.pdf

Climate Change and Food Security: A Framework Document, FAO

[http://www.reliefweb.int/rw/lib.nsf/db900sid/PANA-7KADCQ/\\$file/fao_may2008.pdf?openelement](http://www.reliefweb.int/rw/lib.nsf/db900sid/PANA-7KADCQ/$file/fao_may2008.pdf?openelement)

I hope you'll find these resources useful and look forward to follow the discussion further.

Best regards

Faith

Faith Nilsson
FAO, Italy

Victor Puac from Guatemala

Dear colleagues

My name is Victor Puac, I am from Guatemala and have been working 25 years on national and international consultancies in Food Security and Nutrition (FSN) issues. I have been a consultant for FAO Latin American and I am very happy to contribute to this discussion. Currently I am part of a consulting company working on issues of local power, food and nutrition security and public health.

I am taking this opportunity to refer to the point that is tickling me since a while and that for time constraints I didn't have the chance to write about yet. I made some contributions to other forums related to Food Security and Nutrition (FSN) and I think today is my chance.

I've been following the contributions related to the discussion "Food Security of Women Farmers in the Context of Climate Change". I think in principle that the concept must be clarified from its origins, ie I'm not sure that "separating" food security needs by gender issues we can achieve the best results.

We have an example with UNICEF that works mainly for children but finally has to go through the parents and the community to implement projects that are needed. If we only focus on women, how are we going to deal with children and parents? I think we must not remove gender responsibilities and transfer responsibilities to women only.

I think we should retain the duality principle and integrity in the work of Food Security and Nutrition. We all know very well that the issue of FSN is a political one and of "political will of governments" and it seems to me that the gender issue is also a political one and linked to the search of space for women, that I fully agree in supporting, but, in issues of FSN I think that we should not contribute in politicize further but instead contribute to this change in being more pragmatic and concrete with actions that favour the FAMILY in strengthening their FSN.

Building awareness and sensitivity at the families and rural communities' level is a task perhaps a bit more difficult, but I think it's the only way to build and strengthen LOCAL POWER that in the end is the way to return power to communities and families because their actions benefit the achievement, the control and the management of FSN at the local level.

The issue of LOCAL POWER and of CAPACITY BUILDING AT THE LOCAL LEVEL seem to me still far from the agendas of governments, of international organizations and UN agencies, far from being treated more deeply and seriously because sometimes it seems more interesting to achieve food production rather than the awareness for local organization and self-determination.

If we continue with this logic, we will only be condemning future generations to work exclusively to achieve food, but not to "think" that organization and participation are key elements for strengthening LOCAL POWER and finding the best COHERENCE of all aspects of actions.

On the other aspect related to CULTURAL RELEVANCE I'll write later, because I think it is a structural cultural break to only produce VEGETABLES when in different cultures suddenly there are other products that offer a better chance of feeding and nutrition.

With regards to CLIMATE CHANGE I am not an expert, I have my own ideas and I agree with most of the developing world that we will be the ones to pay more the effects and the solutions of that change. But surely there are better experts qualified to discuss on this and I only are left with the reality that I live in my country and that is currently putting at great risk the access to food and food availability for 2010.

Greetings and much positive energy to all!!!

Victor Oswaldo Puac

Original message in Spanish

Estimados Colegas:

Mi nombre es Víctor Puac, soy de Guatemala y tengo 25 años de dedicarme a las consultorías nacionales e internacionales en cuestiones de Seguridad Alimentaria Nutricional. He sido consultor para latinoamerica por la FAO y me da mucho gusto poderles escribir. Actualmente soy parte de una oficina consultora en aspectos del poder local, seguridad alimentaria nutricional y salud publica.

en esta oportunidad quiero referirme al aspecto que desde hace algun tiempo me viene haciendo "cosquillas" y es que por cuestiones de tiempo no he podido escribir pero hoy lo quiero hacer. He hecho algunos aportes a otros foros en los que estoy patricipando relacionados con SAN y creo que hoy es mi oportunidad.

He visto desde hace algunos días las contribuciones relacionadas con "Food Security of Women Farmers in the Context of Climate Change". Me parece en principio que el concepto debe aclarse desde sus origenes, es decir no estoy seguro que "parcelando" las necesidades de seguridad alimentaria por cuestiones de género se pueda llegar a tener mejores resultados. Un ejemplo lo tenemos con la UNICEF que trabaja prioritariamente para los niños pero al final tiene que pasar por los padres y por la comunidad para lograr implementar los proyectos que se necesiten. Si solo focalizamos a las mujeres, cómo le hacemos para los niños y niñas y los padres? creo que no debemos quitar responsabilidades de género y trasladarlas unicamente a las mujeres. Me parece que debe mantenerse el principio de dualidad e integridad en el trabajo de la SAN. Muy bien sabemos que el tema de SAN es un tema político y de "voluntad política de los gobiernos de turno" y me parece que el tema de genero a veces tambien es politico y de busqueda de espacios para las mujeres al cual apoyo y estoy totalmente de acuerdo, pero, en cuestiones de SAN creo que no debemos contribuir a politizarlo más y a cambio de ello ser más pragmático y concretos con las acciones de FAMILIA a favor de las acciones que favorzcan la SAN. Construir conciencia y sensibilidad a nivel de las familias y las comunidades rurales es una tarea talvez un poco más difícil, pero me parece que es la unica vía para formar y consolidar PODER LOCAL que al final es la forma como devolver el poder a las comunidades y a las familias en cuanto a sus acciones que les favorezcan obtener, controlar y manejar la SAN a nivel local.

El tema del PODER LOCAL y el tema de la CONSTRUCCION DE CAPACIDADES A NIVEL LOCAL me parece que todavía están lejos de las agendas de Gobiernos, de Organizaciones Internacionales y de Organismos de Naciones Unidas, de ser ser tratados de manera más profunda y con seriedad porque a veces pareciera que es más interesante lograr la producción y el alimento que la sensibilidad para la organización y la autodeterminación local. si continuamos con ésta lógica, solamente estaremos condenando a las futuras generaciones a trabajar exclusivamente por lograr los alimentos, pero no a "pensar" que la organización y la participación son elementos fundamentales para afianzar el PODER LOCAL y encontrar la mejor COHERENCIA de las acciones integrales.

El otro aspecto relacionado con la PERTINENCIA CULTURAL creo que lo voy a escribir más adelante, porque también me parece un rompimiento cultural estructural, el solo producir HORTALIZAS cuando en las diferentes culturas de pronto hay otros productos que brindan una mejor oportunidad alimentaria y nutricional.

Con relación al CAMBIO CLIMATICO no soy experto, tengo mis propias ideas y comparto con el la mayoría del mundo en desarrollo que nosotros seremos los que pagaremos más caro los efectos y soluciones de dicho cambio. Pero seguramente hay expertos mejor calificados para opinar al respecto y solo me quedo con la realidad que estoy viendo en mi País y que está actualmente poniendo en gran riesgo el acceso y la disponibilidad alimentaria para el 2010.

Saludos y Mucha Energía Positiva para Todos!!!

Victor Oswaldo Puac

Johannes P. Lang from WomenWatch, USA

I would like to invite participants of the online discussion to read the paper: **Women, Gender Equality and Climate Change**, downloadable at:

http://typo3.fao.org/fileadmin/user_upload/fsn/docs/Women_and_Climate_Change_Factsheet.pdf
and also available at: http://www.un.org/womenwatch/feature/climate_change

best regards,

Johannes P. Lang
WomenWatch
New York

Wim Polman from FAO, Italy

In connection with the contribution by Peter Steele from FAO Cairo I would like to emphasize the need to provide all women farmers access to affordable and reliable renewable incl. bio mass based energy from bio gas/ bio fuels or other sources. Deteriorating health, nutrition conditions physical overburdening of women and female children is daily reality for hundreds of millions of rural women. Some countries e.g. Egypt subsidies bottled household cooking gas for over 90% so that it reaches most rural households except in remote areas. Yet this policy is not sustainable and indirectly leads to rice stalks loading on house roofing with dung combined again health hazard and to seasonal burning polluting air etc.

GTZ (*the German Technical Cooperation Corporation*) works on cooking stoves and many other agencies since many years, while biogas is also longtime sought as household solution. Yet major constraints are with local technical maintenance, local culture etc. We need to think out of the box and find affordable and suitable solutions. And this is only the cooking part. For rural women to answer to climate change they need also cash to invest in different income generating activities. Investment in women led small scale enterprise development more than time bound cash payouts (NREG) or other crisis measures are needed.

In Nepal a successful biogas installation program by SNV (*the Dutch International Development Organisation*), FAO IFAD has reached to over 200.000 rural households combined with sanitary facilities which directly had a positive impact on women (still some cultural constraints remain) and FAO also implemented a cooperative development for food security program with strong emphasis on women led small enterprise development and participation in cooperatives. Both government and maoist forces supported this program and asked for contribution to the interim Constitution to ensure legal components of such pro-women activities.

Improved access to productive and sustainable renewable including bio energy sources for women farmers for drying processing and transport to markets is in this context even more important.

I wish Kanchan much success on this topic.

Best regards

Wim Polman
Bioenergy Officer
Climate Change and Bioenergy Unit (NRCB)
Natural Resource Management and Environment Department
FAO
Website: <http://www.fao.org/bioenergy/en>
http://www.fao.org/world/regional/rap/susdev_rural_dev.asp

KV Peter from India

Feminisation of agriculture is a reality after industrial revolution when men migrated to urban and peri-urban areas. Moreover women are historically attuned to farming. In the Indian state of Punjab women drive tractors and other heavy implements. They have mastery over men in conservation of biodiversity. Women are pioneers in the marketing of vegetables, fruits and fishes as well. It is paradoxical that men receive awards and incentives for better performance in farming. Women had no right to farm land. Much changes have happened since then with enactment of women friendly legislations. Much more have to be done. K V Peter

Charles H. Teller from the Population Reference Bureau, USA

Concerning the deeply felt and important contribution of Victor Puac, I encourage you to read it in the original Spanish too (thanks for including the original). Some of the important concepts and words (like the gender focus “me viene haciendo cosquillas”, which is not really appropriated translated as “ticklish”, but as “making me shiver/shiver”: also, “rompimiento cultural” is not a “cultural break” but a “cultural gap/breach”), so are more powerful read in the original.

Having lived and worked on food security and nutrition issues in Guatemala (at INCAP) and Central America in the 70s and 80s, I still see so little improvement in chronic stunting in Guatemala, which remains at African levels in the mostly indigenous areas (where I assume the name PUAC is from). He says the government and international focus mainly on food production misses the key point of the integrated approach of awareness at household and community levels, and on local power and coherence in different FSN actions.

I think that being gender sensitive is an important component of FSN, there is not need to focus exclusively on gender and call in so-called gender-experts into the discussion, as the other article states, as this is often culturally insensitive. It is important to listen to food insecurity and malnourished women, as well as their male kin and youth. The lack of a more balanced, contextual and holistic approach has also being highly criticized by both men and women in indigenous African communities, where women are part of a larger culture of extended households, kinship systems and clans trying to work together to mitigate hunger and malnutrition.

Victor, *por favor*, do as you promise and write more on cultural relevance and the so-called “structural cultural break” in FSN.

Charles

Charles H. Teller

Bixby Visiting Scholar
Population Reference Bureau
Washington, DC

André le Roux from South Africa

Dear FSN Members

I kindly submit some thoughts on the issues of gender equalities in rural communities.

Although poverty is by and large the common denominator for household food insecurity and malnutrition, a distinction should be made between urban and rural communities. Opportunities and support systems are more readily available in urban areas to assist the most needy. Rural communities on the other hand are more thrown on their own opportunities to provide in their nutritional requirements.

Household food security and nutrition is the traditional role of women. They usually provide foodstuff from plant origin, whilst men provide animal products. In rural communities this is quite often still in practice. It is agreed that we must not remove gender responsibilities and transfer responsibilities to women only. Hence it is essential to empower communities and families to take their fate in their own hands with actions to benefit the achievement, the control and the management of FSN at the local level.

The global political drive for gender equality should contribute to a change where women in rural communities could be more pragmatic and concrete with actions that enhance household food and nutrition security. As stated, care should be taken not to place FSN in the political arena.

From the perspective that it seems more interesting to achieve food production rather than the awareness for local organization and self-determination, I wish to add the following comment I made in a previous contribution: "Women farmers can improve their situation by forming cooperatives with neighbouring commercial and developing farmers who already have access to services for appropriate technologies such as ploughing, cultivating and harvesting. Due to the high input cost of agricultural operations, some kind of incentive for commercial and developing farmers should be considered to ensure their participation". This will enhance organization and participation as key elements for strengthening LOCAL POWER and finding the best COHERENCE of all aspects of actions.

It is agreed that there are different options offering a better chance of feeding and nutrition than just vegetables. However, rural communities usually practice subsistence farming on communal land and prevailing climatic conditions and available natural resources are the determining factors of products that are suitable for such practices. Any deficit in nutrients from these practices will therefore have to be supplemented from other sources. In this regard it is essential that knowledge and skills be transferred to rural communities in addressing the issues of local power, food and nutrition security and public health.

Greetings to all.

André le Roux, a pensioner to whom food security and nutrition is near at heart.

Basundhara Bhattarai from the International Centre for Integrated Mountain Development (ICIMOD), Nepal

Dear Members,

I am Basundhara Bhattarai, working in ICIMOD as gender specialist. I would like to thank for initiating this important theme for the discussion. I have the following inputs on the questions you have put for discussions:

How long will it take to demystify the issues of climate change and inform the women farmers about the alternative ways for ensuring sufficient and good quality food at household level?

I don't think I fully understand this question. I also don't think there will be some demarcation of timeline for demystifying the issue of climate change. For me it is a continuous process but the impacts are rapid and observable in recent years. First time in my life I heard that farmers from my homeland could not plant rice in their field because of the lack or limited rain during rice planting season.

If I recalled one of my field trips some 10 years back in far western district, Achham, most of the land was left barren instead women and small kids were carrying the grains from the market using the money sent by their male fellow members mostly from India. I think in this case climate change is not the key reason which compelled men to out-migrate instead of cultivating in their own land stay with their family at home. One reason could be the productivity of the land more importantly proper land use systems. Because of the lack of alternative livelihood options people are compelled to crop rice or other cereals even in the steep slopes which is not helpful from both a productivity point of view and from an environmental point of view. For instance, if the area is most suitable for apple we need to plant apple, the government or any other service providers have to provide the necessary support (market, road etc.) for the promotion of it.

Another example I would like to give is in many places the land is kept barren because it belongs to big land lords and they don't bother about its productivity. Yet in other cases the ownership over land has also become important issue for increasing productivity: e.g. the power relation between tenants and land lords.

If we link all of these to women farmers, it become more complex and need to be analyzed further.

How can the farmers make the public services more accountable for providing prompt services for appropriate technologies?

Here what I experience is that the farmers themselves need to be pro active and organized to make the available service and technologies accountable. Development organizations can help them in this line but in a way like 'teaching them to catch fish by themselves rather than providing fish already caught by somebody else'. Such help may include to provide- information, choice of technologies, linking farmers groups to appropriate service providers etc. There are already good examples where organized farmers' groups, federations and alliances who have already been able to demand accountability from the government and other organizations.

Why can't the donors and the public service agencies make it a priority to address the issues of women and food security in a different way?

In several developing countries in the region and in the world, unfortunately it is not the priority issue. We often blame unstable political situation and frequent change of government as the important hindering factors but often forgotten other strong social and cultural linkages which weaken women farmers from being the priority. When we talk about women farmers, we need to ask how many acres of land is own and controlled by women? For me land rights to women farmers is not the panacea but the prerequisite.

Do civil society organisations have the necessary scope and independence to educate the farmers to adapt food production and consumption to such diverse climatic condition?

For this civil society organization can play a great role in informing the changing situation, helping them adapting different ways of food production in diverse climate conditions and linking them to the appropriate support organizations and network. The role of civil society is even more very crucial in the areas where the government mechanisms are not strong.

What role should the governments of developing countries play to minimize the risks of climate change and promote adaptation of the local communities as an immediate solution?

I think the most important action that government should do is to put priority on researching different varieties of crops which can resist drought/ excess of water and so on. For instance, I would like to recall the practice followed by some farmers in some villages of Nepal where the farmers has started to adapt drought resistance short rotational varieties of rice.. In other cases, farmers started to adapt multiple cropping which allows the land not to exposed in the direct sunlight and keep it moist and in the mean time provide some safety net in case some crops get failure. I find this link useful.

<http://www.scidev.net/en/opinions/agriculture-can-adapt-to-climate-change.html>

Apart from government, it should be every development organizations' job to play a role in minimizing the risk of climate change and promote adaptation. In my view, the following could be some immediate solutions:

- Adapt age old Agro- forestry practices – help to keep the land moist as compared to single cropping
- Diversify Agricultural crops
- Introduce rain water harvesting technologies, better utilize the waste water eg water used in the kitchen can be collected and used in kitchen garden etc.
- Facilitate women's access to alternative and renewable sources of energy (eg. bio briquette-energy saving, workload reducing, avoiding smoky kitchen)

Best regards

Basundhara

Nisha Onta from Nepal

First I would like to thank everyone for the interesting discussion. I am a PhD student and my research is based on Nepal, primarily on the district of Humla which is one of the least developed districts of the country. Though I was conducting my research using gender pathways to climate change adaptation in their livelihoods, food insecurity came along as the major effect of climate change in the region. As most women are responsible for the production of crops and all the other reproductive and productive tasks, food insecurity adds one more burden to their drudgery.

There is definitely lack of awareness of the effects of climate change in agriculture and whatever agriculture extension program that is advocated by various organizations are not reaching the poorest of the poor, it somehow gets lost between the district headquarter and the villages. Women are not being capitalized by development projects and indigenous knowledge is also not getting documented and incorporated in programs.

Nisha Onta

Victor Oswaldo Puac from Guatemala

Dear Colleagues:

Thank you again for the opportunity to write once more.

Thank you also to Charles Teller for taking his time to read my modest contributions to such an important discussion as this on "Food Security of Women Farmers in the Context of Climate Change". The comments you made on the translation, which I believe was prepared by FAO in Rome, are also valid.

I also had the opportunity to work at INACP (*Instituto de Nutricion para la America Central y Panama*) between 1988 and 1990 together with Alexandra Praun, Maarten Immink, Jackes Arnould and other colleagues, on a topic, the community organization and participation, which at the time was still risky to speak about in Guatemala.

Coming back to the topic of the discussion I feel that those responsible for the coordination have made a big effort to keep all participants updated and I imagine that by now a good amount of information and data has been collected so that I think it might be a good idea to organize the following phases of this discussion around SPECIFIC THEMATIC AREAS. Already, the level of the discussions is very good, with valuable contributions.

I would suggest that maybe the discussion and the contributions could take place around the following dimensions.

1. GEOGRAPHIC DIMENSION. It is clear that in different parts of the world follow different practices and therein lies the richness of this Forum.
2. POLITICAL DIMENSION: Although the subject of Food and Nutrition Security (FNS) includes this dimension implicitly or explicitly, some probably will not like to deal with it while others do.
3. TECHNICAL DIMENSION: As I wrote on occasion of the World Food Day and the meeting in Rome, the problem of FNS is not technology (and of what more you have), it is a problem of "political will of successive governments in rich and poor countries" and of how to realize FNS in the different realities of the poor countries in which we technicians are immersed.
4. CULTURAL AND INTERCULTURAL DIMENSION: It is also clear that as long as this aspect is not analyzed in depth and given its own space, in particular in relation to indigenous populations, technicians and people will have a hard time understanding each other's needs and ideas.

Greetings and good luck!!!

Victor

Original message in Spanish

Estimados Colegas:

Gracias de nuevo por la oportunidad de poder escribir nuevamente.

Gracias también a Charles Teller por tomarse el tiempo de leer mis modestos aportes a una discusión tan importante como es el tema de "Food Security of Women Farmers in the Context of Climate Change". Los comentarios que has hecho por la traducción que me imagino hicieron en FAO Roma también son válidas.

También tuve la oportunidad de trabajar en el INCAP entre 1988 y 1990 junto Alexandra Praun, Maarten Immink, Jackes Arnauld y otros compañeros, en un tema que en esa época era para Guatemala era todavía de mucho riesgo hablarlo como era "la organización y la participación comunitaria".

Retomando el tema de éste Foro, me parece que los responsables de coordinar el presente Foro han hecho un gran esfuerzo por mantenernos actualizados a todos los participantes y me imagino que ahora se dispone de una buena base de datos e información mundial, que creo sería una buena oportunidad el poder organizar las siguientes fases del presente Foro en AREAS TEMATICAS ESPECÍFICAS. Ya que el nivel de discusión es muy bueno y con aportes valiosos. A manera de propuesta talves los aportes y las discusiones podrían encausarse a través de las siguientes dimensiones:

1. DIMENSIÓN GEOGRAFICA. Es claro que en diferentes lugares del mundo, tenemos diferentes prácticas y allí radica la riqueza de éste esfuerzo.
2. DIMENSIÓN POLITICA: Aunque el tema de SAN lo es de manera implícita y explícita, algunos talvés no les gustará abordarlo y a otros sí.
3. DIMENSIÓN TÉCNICA: Cómo lo escribí en su oportunidad en otro Foro, en ocasión del Día Mundial de la Alimentación y la reunión realizada en Roma. El problema de la SAN no es de tecnología alimentaria (es de lo que más hay), es de "voluntad política de los gobiernos de turno en los países ricos y pobres" y del CÓMO poderla hacer realidad en las diferentes realidades de los países pobres, en la que los técnicos estamos inmersos.
4. DIMENSIÓN CULTURAL E INTERCULTURAL: Es claro también, que mientras éste aspecto no se analice a profundidad y se le de su propio espacio sobre todo en poblaciones indígenas y autóctonas, los "técnicos" no van a entender "qué es lo que la gente quiere" y las personas por supuesto que tampoco van a entender que es lo que los técnicos queremos.

Saludos y muchos exitos!!!

Victor

Charles H. Teller from the Population Reference Bureau, USA

Victor (*Victor Puac, previous contributor to this discussion*), thanks for the suggestion of further discussion along "specific thematic areas". Little has been said about your fourth topic, intercultural dimensions in FSN, particularly where the community and the outsider technical advisors interact.

From a rural socio-cultural view working in indigenous and tribal areas, I am finding that a participatory, empowering, and appreciative inquiry approaches are all important but that outsiders have little time to invest in understanding the insiders' needs. One of the best "insider-outers" is to have university students (female and male) trained in these bottom-up research methods as part of the team, as they can often bridge the many gaps, lack of trust in outsiders being very important.

In years of decentralized work in rural FSN vulnerability/resilience/capability assessments in Ethiopia, we find it important to understand the community's intrinsic identity for working together for FSN along all six dimensions:

- 1-Tribal/ethnic
- 2-Religious/sectarian
- 3-Locality/geographic/historic

- 4-Political
- 5-Socio-economic/livelihoods
- 6-Generational (Elders, Youth, etc.)

The role of women and female farmers in food/nutrition security is a cross-cutting issue on most of these dimensions, and it is important to have a respected, female outsider on the team to talk to their female insider counterparts.

Victor and others, from your work in indigenous Guatemala and other indigenous/tribal areas, how have you addressed the insider-outsider gaps in dealing with FSN?

Charles

Charles H. Teller
Bixby Visiting Scholar
Population Reference Bureau
Washington, DC

Ignatius Onimawo Ambrose Alli University Ekpoma, Nigeria

Dear Colleagues,

I wish to lend a voice to the issue of women food security in relation to climate change. Even without the issue of climate change many women farmers in most parts of Nigeria suffer discrimination in terms of land allocation. In many traditions women farmers only have access to land allocated to them by their husbands which in most cases are the areas the husbands consider less productive. Climate change which is having a lot of impact on desertification in some northern states in Nigeria further pushes the women farmers to the barren portions of the affected land. Climate change imposes stress on unwilling governments to consider the option of irrigation in the northern states and also creates erosion problems in the southern states. In this scenario the women farmers are the worst hit. I think cultural impediments to rights of women farmers is a far more serious problem than the effect of climate change.

Prof. Ignatius Onimawo

Nutritionist
Ambrose Alli University Ekpoma,
Nigeria.

Bernard Ndubuisi Okafor from the National Horticultural Research Institute, Nigeria

Climate change is real as it is evident in sea level rise, desertification, erosion, flooding and various forms of land degradation. In many areas of the world, it has led to changes in farming systems, decline in soil quality and species diversity culminating in serious increase in undernourishment and food insecurity. Women occupy over 70% of food production chain especially in developing countries as they are actively involved in various forms of farming activities, from land preparation to harvesting/processing and marketing. This points to the fact that a great deal of women are affected by the food insecurity arising from climate change as women are often left with limited option in food consumption to supplement their "nutritional base" to cope with prevailing changes in climate especially in the course of various farming activities. Government can contribute significantly to mitigate the problems by public enlightenment programmes on the reality of climate change and its effects on various aspects of life. This will also necessitate the education of women and female children to understand the signs of the times.

Government should also make laws that favour afforestation and proper land use and empower the citizens towards that poverty reduction. Furthermore in countries where there is high level of

release of green house gases into the atmosphere as a result of use of "generators" and lantern, government should ensure electrification of rural areas and regular power supply for both industrial and domestic use especially in urban areas of the developing world and also enact laws which would deal severely with issues of deforestation and bush burning.

OKAFOR Bernard Ndubuisi
National Horticultural Research Institute
Nigeria

Denis Drechsler from FAO Italy

Dear All,

I briefly wanted to respond to the contribution of Maria van Heemstra, especially her plea to better recognize women's unpaid work. I think there is a misunderstanding on how to interpret the recommendations that are provided in the Policy Brief on "Women and Rural Employment". The brief does not value "paid employment" more than "family activities". It simply refers to women's (usually) greater family obligations as a contributing (and explanatory) factor to their (usually) lower participation in paid employment. However, in the absence of a proper value system of unpaid work, being excluded from the labour market due to family obligations exposes women to more discrimination, inequality and injustice. Without proper jobs, women frequently do not have decision-making power on the use of financial resources; they may lack access to information channels; and depend on their husbands for health and other social security services. Finding mechanisms to share family obligations on a more equal footing between women and men may therefore simply be a first (and easier) step towards reducing gender inequalities. Simultaneously, societies should work towards increasing the recognition of women's unpaid activities as important contributions in their own right; this may nevertheless be a lengthy process without immediate results.

Denis Drechsler

Shashi Kumar from India

Respected members,

Food security is a multifaceted concept that goes far beyond the number of people that can be sustained by the earth's limited food resources to encompass a broad range of issues: population growth, control and mobility, resource distribution, consumption patterns, agricultural production, climate change, environmental degradation, socio-economic status, development, trade relations, land ownership rights, access to microfinance and access to healthcare services. All of these issues are central to women, yet women's role in food security has remained practically invisible to many policy-makers.

Graphically, while women represent nearly 50 percent of the world's adult population and one-third of the total labour force, they labour nearly two-thirds of the total working hours but receive only one-tenth of world income and own less than one per cent of property. The story of overworked women in the rural areas of the developing and underdeveloped countries of the world is too well known. The type of agricultural activities generally expected of women is highly labour-intensive and the rural women generally do not enjoy the benefits of new technologies. Their wages are generally less because it is assumed that the efficiency of women's labour is poor compared to that of men.

Much of women's productive activity is localized in the informal economy and is not represented in official statistics on food supply and movement. Recognition and adequate compensation of women's productive as well as their reproductive labour is essential to maintaining their contribution to global food production and security. Women grow about half of the world's food,

but own hardly any land have difficulty in obtaining credit and are overlooked by agricultural advisors and projects. Regarding ownership of land, women do not enjoy equal rights, particularly in the developing countries where most of the production, processing, storage and preparation of food is carried out by the women. These account for 50 percent of the total labour required for food production. Many of these tasks are performed by children, especially the girls. Besides helping the men folk in many farm operations, women have to shoulder the entire responsibilities for household chores. Bringing water from far-off wells and rivers and gathering fuel wood from forests are also part of their daily duties. Such enormous waste of human energy is unnecessary in this technological age.

Women's contribution to agricultural production varies from country to country, crop to crop and task to task. In Africa, three-quarters of the agricultural work is done by women while in Asia, Latin America and the Middle-East, women comprise half of the agricultural labour force. On a global scale, women produce more than half of all the food that is grown. In sub-Sahara Africa and the Caribbean, they produce up to 80 percent of basic foodstuffs. In Asia, they provide from 50 to 90 percent of the labour for rice cultivation. And in Southeast Asia and the Pacific as well as Latin America, women's home gardens represent some of the most complex agricultural systems known. In countries in transition, the percentage of rural women working in agriculture ranges from about a third in Bosnia and Herzegovina to more than half in Poland. Across much of the developing world, rural women provide most of the labour for farming, from soil preparation to harvest. After the harvest, they are almost entirely responsible for operations such as storage, handling, stocking, marketing and processing.

Women are often the preservers of traditional knowledge of indigenous plants and seeds. As the ones responsible for supplying their families with food and care, they have a special knowledge of the value and diverse uses of plants for nutrition, health and income. They grow traditional varieties of vegetables, herbs and spices in their home gardens. Women also often experiment with and adapt indigenous species. They are involved in the exchange and saving of seeds. This has important implications for the conservation of plant genetic resources. Unfortunately, the importance of women's knowledge and expertise on biodiversity is often overlooked or ignored by development planners.

Climate change, environmental degradation and the loss of natural resources increases the work load of women who have to walk farther to collect fuel wood and water. As a result of deforestation, women have also lost the source of many food items, medicinal products and other products used in the household.

We recognize that the climate crisis is complex and far reaching, and we need to act urgently in order to put into place systems that can address the climate crisis in long term and sustainable ways. For this we need real solutions that will tackle the roots of the climate crisis rather than mechanisms that allow corporations to profit from the crisis and allow the wealthy to keep consuming and depleting resources, and polluting the atmosphere.

Despite their contributions to food security, women tend to be invisible actors in development. All too often, their work is not recorded in statistics or mentioned in reports. As a result, their contribution is poorly understood and often underestimated. There are many reasons for this. Work in the household is often considered to be part of a woman's duties as wife and mother, rather than an occupation to be accounted for in both the household and the national economy. Outside the household, a great deal of rural women labour - whether regular or seasonal – goes unpaid and is, therefore, rarely taken into account in official statistics.

Dr. R. Shashi Kumar
M.A. M.Phil., Ph.D.
Bangalore University
India

Andrea Markos from Italy

Dear colleagues,
Please find below a very interesting testimony from Copenhagen.

Best regards,
Andrea Markos

Grassroots Women's Leader Speaks at UNFCCC Climate Change Talks alongside Nancy Pelosi and Other Distinguished Panellists

Ana Lucy Bengochea, Director of the Garifuna Emergency Committee of Honduras, and member of the Huairou Commission and GROOTS International, was a key note speaker on a high level panel--"Investing in Women's Leadership for Climate Solutions" at the Conference of Parties (COP) in Copenhagen on December 17, 2009. Organized by the Global Gender Climate Alliance, this side event featured: Tarja Halonen, President of the Republic of Finland, Gloria Macapagal- Arroyo, President, Republic of the Philippines, Nancy Pelosi Speaker of the House of Representatives, Ulla Tørnæs, Minister for Development Cooperation, Denmark, Dr. Florence Chenoweth, Minister Agriculture, Republic of Liberia, Winnie Byanyima, Director, Gender Team, United Nations Development Programme and Katherine Sierra, Vice President for Sustainable Development, World Bank.

Ana Lucy's speech, received a series of positive affirmations from the panelists, further acknowledging that grassroots women are active agents of change with a series of innovative practices to manage risk and reduce vulnerabilities and contribute to climate resilient adaptation.

Financing Grassroots Women's Initiatives to Promote Resilience **Ana Lucy Bengochea**

I am Ana Lucy Bengochea, and I bring to you the perspective of people who are already implementing successful strategies for combating and adapting to climate change, but who are ignored and unfunded in most of the policy decisions: grassroots women. And without investment in grassroots women's leadership for climate change strategies, change on the ground will be unsuccessful and targets will be unmet.

I come to you from Honduras, from the Garifuna Emergency Committee of Honduras, (or Comite) which now has over a decade of experience in supporting communities to be resilient in the face of disaster and climate change. But I also represent the tens of thousands of grassroots women who are part of GROOTS International and Huairou Commission, two global networks which bring together women and community groups in similar struggles.

On the ground in Honduras, since Hurricane Mitch in 1998, we have worked with farmers, fisherpeople, small business owners, women's groups, youth, recovering from the yearly cycle of hurricanes and the degradation of our natural environment, promoting development which is sustainable, and making our Afro-Indigenous Garifuna communities stronger so that whatever the next disaster - climatological or manmade - we are better able to survive it.

Working with and listening to our elders, many of whom work the earth day after day with their hand-held tools, we know that the patterns of hardships we face is changing, worsening. The droughts, the floods, the winds, the erosion, the pests - are all more extreme. And when we come together in the Huairou Commission and GROOTS networks, we discover that across the globe, grassroots women and their low-income communities are being battered by these increasingly severe conditions. Indigenous knowledge that has worked for centuries is being challenged by conditions never seen before. We're losing homes to worsening landslides in urban settlements. Crops fail as a result of unprecedented climate extremes. For all of us, the devastating effects on livelihoods, infrastructure, health, food security, housing, water and sanitation are catastrophic.

In the face of this, we take action, and grassroots women are developing some of the most innovative responses to climate change and disaster challenges, reducing vulnerability and the

loss of assets and livelihoods. On the ground, we improve methods of processing traditional root crops so they don't rot in the soil after the floods. We reforest the eroding beaches with wild fruits like sea grapes and almonds, and create seed banks and nurseries for the medicinal and artisanal plants we used to be able to find in the wild. We obtain land and rebuild better housing. And, just as importantly, we learn from the accomplishments of our sisters, so lessons from Swayam Shiksan Prayog (SSP) in India and from women surviving earthquakes in Turkey teach us to advocate and build alliances with our local government. From our counterparts in Jamaica, we learned to conduct community risk mapping, and we utilize it in those dialogues with authorities.

But all this innovation and progress in battling climate change can not come about through simply good intentions, good practice or even good luck. And, you may be surprised when I say; it does not need only financial support. To be successful and sustainable, it needs permanent, accountable mechanisms of financial support. To demonstrate that such mechanisms are possible and, in fact, vital to ensuring that organized women's groups living in and developing their poor communities are financed to take public leadership in these processes, we designed a Community Disaster Resilience Fund in 2008 as members of GROOTS and the Huairou Commission. Pioneered in India and Latin America with an initial investment of under 200,000 US dollars, this year we have raised 4 times this amount through partnerships with UNDP India, the Government of Norway, and other donors. We now are focused on raising 5 million dollars in 2010 to ensure the sustainability of the process and the engagement of a critical mass of grassroots women's groups in 10 more countries. When poor, vulnerable communities are empowered to make plans and design initiatives that protect their communities through active cooperation with their local and national governments, resilience against climate change and natural disasters will become a bottom up demand and reality, not a top down invention as it is now.

In the Committee, we have learned risk mapping and then trained 60 community leaders in 7 communities to do risk mapping. This is helping us identify risks and vulnerabilities and make our communities aware of vulnerabilities as well as resources, skills and knowledge. But we don't stop with awareness. We take action. We use the risk maps to negotiate with local authorities to build bridges, and support community efforts. We are scaling up our seed banks which protect our food and livelihoods in case of hurricanes, and linking up with 5 local government entities.

With community funds we can transfer this approach to 30 Garifuna towns and villages. In India, UNDP support of the Community Disaster Resilience Fund (CDRF) will expand financing to grassroots women's groups from 88 to over 500 villages in 5 states of India. Our network supports grassroots women in transferring our knowledge and strategies and building large constituencies that can engage state as well as national governments. As expert practitioners and knowledge holders we have advocated to secure a place at the table, working with the UN in New York, Bonn, Geneva, and Nairobi, accessing South-South funds, and training staff from the World Bank at their headquarters.

As a ground breaking example, our grassroots groups from around the region are working in partnership with the Coordinating Centre for the Prevention of Natural Disasters in Central America (CEPREDENAC), to partner and link with our national governments, to accelerate locally led action in high risk coastal, mountain, and drought prone communities. And through the connections made by our global networks, we will be exchanging the best strategies between India and Central America, among grassroots women, India's National Disaster Management Authority and CEPREDENAC.

Yet we recognize that piloting our resilience fund and calling for such investments is not enough. We must act together to eliminate the discrepancy between documents' references to the need for investing in women's leadership and gender equitable programming opportunities, and the current climate change financing and implementation agendas - agendas which are neither pro-poor nor gender smart at present. We believe it is essential to press collectively -- with the UNDP Gender team and our Gender and Climate Change Alliance colleagues --for a dedicated percentage of adaptation funds to be set aside to enable organized groups of women who have a track record working for sustainable local development and women's empowerment, such as

indigenous, grassroots, and networks that link and build our capacities across borders. We also need to collaborate to ensure bi- and multi-laterals model their commitments by pledging and supporting existing and new mechanisms (such as the CDRF).

Finally, in addition to getting the resources in the hands of local communities by 1) mechanisms like the Community Disaster Resilience Fund and 2) proportional budget set-asides, we must involve grassroots women in all levels of decision making. Gender issues must be more than policy rhetoric: affected women must be involved in the design, implementation and evaluation of policy and programs. Grassroots women are the creators, workers and the geniuses behind combating and adapting to climate change. If we fail to establish mechanisms to get resources and power into their hands, the grandest plans to stem and survive climate change will never bear fruit.

Margaret J. Koyenikan from the University of Benin, Nigeria

Dear Members,

Below are my brief answers to the questions raised on Food Security of Women Farmers in the Context of Climate Change.

How long will it take to demystify the issues of climate change and inform the women farmers about the alternative ways for ensuring sufficient and good quality food at household level?

Women are faced with realities of climate change: they spend more time fetching water and firewood, experience crop failure, drought, erratic rainfall pattern, excessive heat etc culminating in low productivity, ill health/ diseases and even death of household members. This is a vicious cycle whereby they spend more time as care givers or even become household heads further reducing productivity, food insecurity and poverty. All they need is pragmatic solutions to their poverty and food insecurity to which the time is now via promotion of best practices and technologies that will help them to cope and overcome the effects of climate change: poverty and food insecurity.

How can the farmers make the public services more accountable for providing prompt services for appropriate technologies?

By mobilizing and organizing themselves into groups (cooperatives) for development purposes and demanding extension and other services which will alleviate their sufferings from government

Why can't the donors and the public service agencies make it a priority to address the issues of women and food security in a different way?

Some public service agencies and donors are making efforts in Nigeria but the magnitude of the problems and the audience/ target groups far exceeds the scope of what the available resources could meaningfully address and make substantial impact. There is need to encourage more agencies to take up the challenge of addressing climate change. Government needs to substantially fund agriculture and rural development in developing countries to achieve the MDGs.

Do civil society organisations have the necessary scope and independence to educate the farmers to adapt food production and consumption to such diverse climatic condition?

In Nigeria for example there is no limit to which civil organizations could go in providing information to farmers, however there is need for effective coordination and collaboration with government organizations for quality assurance and resource maximization.

What role should the governments of developing countries play to minimize the risks of climate change and promote adaptation of the local communities as an immediate solution?

- Massive enlightenment campaign on climate change- the risks, coping mechanisms and mitigation measures;
- National policy on sustainable environment and support its implementation by mainstreaming gender and other strategies;
- Target women as the most vulnerable and the agents to effect change;
- Encourage private sector and NGOs investments and ensure quality;
- Invest in agriculture and environmental sustainability

Dr Margaret J. Koyenikan
Agric Extension & Gender Specialist
Dept of Agric Econs & Extension Services
University of Benin
Nigeria

Raziq Kakar from Pakistan

Indigenous livestock breeds are well adapted and can be use successfully in combating dessertification and global warming. The concurent droughts and scarcity of vegetation increased its importance many folds.

Women play pivotal role in managing genetic resources of Indigenous breeds. They are well familiar with the indigenous knowledge about each breed and process animal products and sell to earn money. In most of the cases the income of the by-products and the income from the rural poultry goes in the pocket of the women. I thin this point can be corelate with the women role with the food security and global environmental change.

My best regards,
Raziq

Lizzy Nneka Igbine from Nigerian Women Farmers Association

My suggestion is that this group have not been reached or captured by government.

There should be a sincere and urgent programme to reach educate and integrate this group who cotribute 65 percent to current food security.

They need education and finance. Introducing rural microfinance will help us then these women will be included in climate change issues education.

Lzzy Igbine
President Nigerian Women Farmers Ass.

CONCLUDING REMARKS BY KANCHAN LAMA

Congratulations to the FSN Team for the professional management of the discussion. I extend my sincere thanks to all who enriched the discussion by valuable contribution.

The discussion attracted diverse impressions from more than twenty five contributors mostly from developing countries, including contributors also from developed countries. The discussion centred around five issues, such as, 1) importance of demystifying climate change processes and factors leading to the process in order to enable the women farmers as they are more vulnerable to climate change effects due to feminization in agriculture, so that they could cope up with planned alternative ways to deal with the negative effects on food security at household level, 2)how could the farmers influence effectively the public service agencies to provide timely services including appropriate technologies, 3)how to address the slackness among the donors as well as the service providers to make the women farmers' need a priority, 4) how to enhance the role of civil society organizations to work with a wider scope to educate the women farmers to adapt to the changing climatic conditions for

food production and consumption and 5)lastly, what roles must be played by the governments of the developing countries' to minimize the risks of climate change on food security, including promoting adaptation skills of the local communities as an immediate solution.

A few contributors expressed doubts about the importance of demystifying climate change process and factors at grassroots level. They viewed that since the farmers, especially the women farmers, have been adapting to the environmental change effects as an everyday reality; the topic of educating them differently is not that relevant, as the farmers are already knowledgeable. Contrary to that view, others highlighted on the importance of educating the farmers, especially the women farmers urgently about the trend of climate change and their roles for preparedness. As Basundhara points out, it is a continuous process and should be an integral part of agriculture and natural resources related training curriculum. In most developing countries, women farmers are left alone to feed the family from the food they grow. The case sent by Agnes Yawe about the poor mother Josephine Ezati from Eratic village of Zambia very well depicts the picture how the victim mothers at the grassroots level are suffering in their day to day life just to survive with a one time meal a day along with their children.

Nutritional aspects together with livelihood issues have become a “strange” challenge for these farmer mothers of developing countries who are almost left alone to handle the diverse situations of food production without having being exposed to appropriate information about factors of climate change, women friendly extension services, most needed agricultural inputs, suitable technologies and other means for accessing quantity and quality food. In the absence of rural employment opportunities, the men farmers often travel out in search of wage earning opportunities that make women farmers' work burden unbelievably intensive. As Peter describes, “agriculture is getting feminized with more women in farming” while throwing light of hopes as many institutions have been responding to such a changing role of women farmers by equipping them with appropriate farming technologies along with capacitating them to be better organized to claim services in various countries including India. FAO has been highlighting this aspect through various documents, research and studies along with providing the **“Women and Rural Employment Policy: Fighting Poverty by Redefining Gender Roles”** that can and should be referred to by the agricultural planners for better addressing the needs of women farmers in such an unusual context. The need to recognize women farmers is emphasized by all as the primary stakeholder in agricultural development. Maria argued for equality in recognizing the women farmers with that of men by providing equal status and support in credits, education and creating access to land that also supports Denis's opinion. The aspect of valuing women's work at an equal level is an important factor to enhance women's decision making position. But the reality, as highlighted by Maria again, although women perform 80% of domestic tasks, even in developed country like France, their work remain unpaid along with getting marginalized. Gender discrimination is the root cause for marginalization of women from mainstream of agricultural development which however needs to be corrected in order to enable women farmers take a leadership position in all kinds of agriculture related decisions. As Denis pointed out, societies should work towards increasing recognition of women's unpaid activities as important contributions in their own right. A common view about rural women being highly knowledgeable about agriculture and able to provide inputs for pragmatic planning for agriculture development in the context of changing climatic conditions underlined almost all the contributions. However the position of women of developing countries is that of secondary decision makers, as Shashikumar and Brigitte mentioned, **women of developing countries do not have right to land, marginalizing them from accessing formal credits, remain unnoticed during agricultural surveys, and lack access to technologies, extension services and productive resources including capital.** As Ignatius Onimawo views, cultural impediment to rights of women farmers is a far more serious problem than the effect of climate change. The discriminatory provisions have made women farmers more vulnerable along with effects of climate change and many of the service provider agencies are no any different to such cultural attitude and behaviour.

There is a need to review organizational systems within the existing service providers, donors and international agencies in order to engender policies, structures, systems and organizational culture to respond to the needs of this knowledgeable but marginalized group. However unless and until the victim group gets prepared by themselves to claim justice, the outside support mechanisms will not be sustain. The contributors brought up **many good examples of how rural women farmers have united together by themselves, especially facilitated by civil societies to address the issues of discrimination and have been successful in claiming appropriate food security systems, mechanisms, services, technologies, information and resources.** In this context, awareness raising about own responsibilities towards protecting and

nurturing the environment is an important aspect that need to be taken care by everybody on his/her own. As Peter Steele advocates, "the environment starts with me", which is very true of the poor women farmers who tend to nurture the natural resources for sustainable use for household purpose opposite to destruction of the natural resources. Victor argues to return power to communities and families as their actions benefit the achievements, control and management of food security and nutrition at local level. However local capacity building is far from government agendas and local power is insufficiently targeted at women farmers by the governments, international agencies and even the UN through collaborative efforts.

Wim Polman emphasizes the need to provide all women access to affordable and reliable renewable energy including biomass based energy from biogas/bio fuels or other sources. Argued for investment on women led small scale enterprise development more than time bound cash payouts or other crisis measures. He cited a successful up scaling example by government in Nepal, by incorporating project lessons into the interim constitution to ensure legal components of such pro-women activities. Similarly Thilak Ranasinghe cited lessons from Srilanka about Family Business Garden (FBG) as an innovative technology for diversification of agriculture to improve food security in times of diverse climatic situation. Under a dynamic leadership, women involvement and public interest integrated in FBG concept helped to include family nutrition and women contributions at the household food production with urban agriculture into the national Agricultural policy in Srilanka in 2003 and in 2007. In this context, investment for women's activities to address climate change effects is highly significant as shared by Ana Lucy Bengochea at COP 15, Copenhagen, emphasizing that without investment in grassroots women's leadership for climate change strategies, change on the ground will be unsuccessful and targets will be unmet. Despite being knowledgeable, women at the ground have experienced severe climate change effects which were never seen before. She further argues that along with reviving age old traditional knowledge and skills, it is not easy to tackle with the serious problems created by the changing climatic conditions and so, there is the need to establish permanent, accountable mechanism of financial support to implement actions for enabling women to set up structures, systems and influence policy makers to adopt appropriate service delivery mechanisms.

A number of constructive recommendations are collected through the discussion, which can be useful for planners and implementers

- Organize massive enlightenment campaign on climate change-the risks, coping mechanisms and mitigation measures need to be organized by joint efforts between civil society and government agencies together with the UN
- Make use of the important Women's Rights Days and existing facilities (reference: Elly Pradervand, WWSF) to communicate and strengthen women's rights to food sovereignty , environment, and other related civil rights, e.g., citizenship right, land rights and right to public services, etc.
- Recognize women's role in food security as the major stakeholders and involve them in planning of food security programs and disaster preparedness activities, along with reorientation on giving value to women's reproductive activities
- Recognize and respect indigenous knowledge and skills of women farmers about the nature and diversification of agricultural crops under adverse climatic conditions.
- Endorse the use of existing proven technologies for preparation and preservation of food and the use of fossil fuels, animal dung, crop rests and wood.
- Develop knowledge management systems at grassroots level through collaboration among the existing facilities.
- Involve men and children in all the activities related to enhancing capabilities to cope up with climate change effects on food security as they also should be responsible to improve situations.

- Target women as the most vulnerable and the agents to effect change; employ women extension workers to reach women farmers with extension messages and training;
- Encourage private sectors and NGOs investment and ensure quality
- Government should invest in sustainable rural development together in consultation with women in a bottom up approach
- Pay attention to climate change funds that are being established (e.g., adaptation fund) and ensure watch monitoring of utilization of the fund for women farmers.
- Women farmers should prepare themselves by forming cooperatives and linking up to other commercial groups in the neighborhood as well as with local government for wider influencing food security policies and strategies
- Encourage home gardening for nutrition and food security as diversified agricultural practice.
- Facilitate women's access to alternative technologies for water and energy consumption as well as recycling including rain water harvesting
- Organize women farmers groups to claim allocation of public budget to support programs for building up women farmers' leadership capacity to manage food security under adverse condition of climate change.
- Develop information sharing network on climate variability, support the development of seed banks at local level, managed by farmers themselves
- Continue advocacy by organizing rural women farmers' voice at all levels of policy making to influence and get them address gender dimensions through favorable policies for women farmers.
- Governments need to have their priorities right and should assert these priorities when negotiating with donors. If Agriculture is the mainstay of our economies as stated in most of the policy documents, then we need to see it equally funded. The most effective tool especially for politicians is the vote and therefore farmers need to use it to assert their demands for better services in sectors that matter to them from leaders
- The role of Civil society in mobilizing and empowering farmers here is critical. Appropriate media is equally important in this.

Thanks

Kanchan Lama