Sustainable Agriculture – a Challenge for the 21st Century
Conference report
Bonn, 23-24 November 2010
# Table of content

Introduction .................................................................................................................. 3

1 The need for sustainable agriculture ......................................................................... 4
    1.1 Small is beautiful ............................................................................................... 4
    1.2 The challenges for sustainable farming ............................................................. 6

2 Sustainet: goals and results ....................................................................................... 8

3 Sustainet in the eyes of regional teams .................................................................... 10
    3.1 Africa working group .......................................................................................... 10
    3.2 Asia working group ............................................................................................ 11
    3.3 Latin America working group ............................................................................ 12

4 Scaling up sustainable farming .................................................................................. 13

5 Getting ready for action ............................................................................................ 15

Annexes

Conference programme ............................................................................................... 20

Participants .................................................................................................................. 22
Introduction

On 23 and 24 November 2010, the conference on “Sustainable agriculture – a challenge for the 21st century” took place in Bonn, Germany. During these two days, development organisations, consultants and policymakers discussed the achievements of Sustainet, the Sustainable Agriculture Information Network, a project set up to explore the potential of small scale sustainable farming and opportunities to scale up good practices.

There are 2.5 billion people in the world whose livelihoods depend on agriculture. Of these, one billion are family farmers working small farms (of two hectares or less). The other 1.5 billion include farm labourers, fishers, migrant workers and pastoralists. Family farms are more than just businesses. They also contribute to local, regional and national food security and to economic development. For the farmers themselves, their farms are the basis for secure livelihoods and their well-being.

In 2003, the German Government founded the Sustainable Agriculture Information Network, Sustainet. The aim of Sustainet was to show how smallholder agriculture can contribute to reducing hunger and poverty in developing countries and to change policies in favour of sustainable agriculture. During the past years Sustainet has documented Good Agricultural Practices (GAPs) in Kenya, Tanzania, Bolivia, Peru and India. One of the founding fathers of Sustainet, Professor Sayer (Director General of Misereor) has a vision about the future of small scale family farmers:

“These small scale farmers have managed to develop sustainable practices through which they feed themselves and maybe the world. If these farmers, with limited resources are able to provide viable solutions for agriculture and food production, which is in crisis, let us imagine what would be possible if they were widely supported by their governments and international institutions, and if they were protected against vested interests pursuing short term profits!”

This report reflects on this goal, on the results achieved by Sustainet, and also on the challenges which still lie ahead. It summarises the key note speeches of experts in development and agriculture and of the participants in the programme, together with the discussions between them during the conference. It shows that participants see the results of Sustainet as a basis for future action and for further up-scaling of sustainable farming.

The conference was organised by The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), and Sustainet partners, on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ).

Sustainet partners in Germany

- German Federal Ministry of Food, Agriculture and Consumer Protection (BMELV)
- German Federal Ministry for Economic Cooperation and Development (BMZ)
- German Council for Sustainable Development (RNE)
- Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
- Brot für die Welt
- Deutsche Welthungerhilfe
- Misereor
Agriculture is back on the international agenda. The need to feed a growing world population has been one of the major reasons behind this development. But intensive industrial agriculture, and especially animal production, makes a large contribution to climate change – basically because of the production of methane, deforestation for large-scale fodder production, and the global transportation of agricultural products. The current agricultural practices also result in loss of biodiversity, soil erosion, pollution and overuse of water.

Population growth and economic development are expected to contribute substantially to an increase in demand for food (especially animal products) and energy. These factors will lead to further price increases on world markets and increased hunger. A further intensification and expansion of industrial agriculture is often presented as the only option to offset these problems.

1.1 Small is beautiful

But what about small-scale agriculture? Today, small-scale family farmers produce up to 70 per cent of food consumed in Africa, Asia and Latin America. Their agricultural production is often better for the environment, as it is adapted to local conditions, using techniques such as multi-cropping for risk aversion, agro-biodiversity and mulching to maintain soil fertility. This way of farming has less impact on the climate and even provides opportunities for climate change mitigation. Small-scale can be very sustainable.

During the conference, several speakers talked about the role of agriculture and why conventional agriculture will not provide solutions for the challenges of the 21st century, including meeting the growing need for food and energy and the effects of climate change. On the contrary, industrial agriculture is can make things worse.
Dr Stefan Schmitz, Head of the division of Rural Development and Global Food Security, BMZ.

“Agriculture has been a forgotten sector. For decades, it has been neglected, or simply ignored, as a pre-condition for food security and as a potential source of sustainable economic growth. Donors have pushed countries to investing in sectors other than agriculture. The food crisis two to three years ago rang the alarm bells and donors and partner countries have had to rethink their priorities. Land degradation is an unsustainable trend. I think land and soil issues deserve the same political attention as climate and biodiversity. The links between climate change, loss of biodiversity and land uses are alarming. Land is not an environmental issue or a luxury, it is the base of food security now, not later.”

Dr Hans-Joachim Preuß, Managing Director of GTZ.

“We not only face the old challenges that we know from the seventies and eighties, but also some new ones: there is the question of climate change which is having a very large impact on small-scale farmers, there is the question of natural and man-made disasters. And we have increasing demands, not only for food (because of population growth and changing consumption patterns) but also for energy, from fossil sources and from bio-fuels. These are new challenges for sustainable agriculture, which mean we have to reflect on and redefine our concepts and inform decision makers on how to get enough food for these people, feed for the animals and energy for growing populations. The danger is that industrial agriculture cannot provide sustainable answers to the challenges of the 21st century.”

Prof. Dr Josef Sayer, Director General Misereor.

Prof. Dr Sayer’s speech was presented by Anja Mertineit, Misereor

“The German Council for Sustainable Development believes that sustainable agriculture is a key solution to increase food security. We realise that, all over the world, small-scale farmers using sustainable, locally adapted farming, produce quality food and ensure food security for their families and their communities. However, although we have evidence of good practices in all agro-ecological zones, insufficient attention is paid to scaling up such practices.”
1.2 The challenges for sustainable farming

Many development and farmers’ organisations, researchers and policymakers are already convinced of the opportunities that small scale sustainable farming provides in meeting the needs of a growing world population for food and energy. The publication of the 2008 World Development Report (World Bank, 2007) and the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD, 2009) clearly show the way forward for sustainable agriculture. But although the time is right for an alternative agricultural approach, real change is difficult to achieve and family farmers still face many challenges. They are more vulnerable to climate change and their room for manoeuvre is limited by agri-businesses and rigid bureaucracies, which still drive much of agricultural development. In her presentation, Dr Rajeswari Sarala Raina from India quoted Ludwig Wittgenstein in referring to this as the “sickness of our age”, our ongoing faith in economic growth, progress and technology as the only solutions to our problems. She said that we should be aware that family farming is much more than a technical way of agricultural production.

Prof. Sayer also highlighted some of the obstacles to sustainable farming:

“All over the world, agriculture and food production is facing serious challenges:

- Climate change is already affecting food production and putting vulnerable, small-scale farmers at risk. At the same time, industrial agriculture contributes significantly to climate change;
- Land grabs are accelerating the development of industrial farming, with multinational companies producing for the world market, and further marginalising small scale producers and local markets;
• Share holders and private equity funds are increasingly using land and agricultural commodities in their speculative activities;
• A few seed companies control the global seed market which is severely reducing agrobiodiversity;
• The agrochemical industry advertises their strategy for industrial agriculture as the solution for the future, despite their past failures;
• A few multinational food companies exert significant control over a large number of value chains, thus reducing market opportunities for small-scale producers and small retailers. In this context, the European Commission has just published a new trade strategy, with a strong focus on opening markets abroad for European goods, services and investment, in order to secure access to raw materials and to strengthen intellectual property rights – both for the benefit of European companies.”

Dr Alexander Schöning, Project Officer Sustainable Management of Resources in Agriculture, GTZ

“Another challenge for the diffusion of sustainable agriculture is its complexity, which makes it difficult to fully explain all its aspects and convince people. Also, there is a lack of support by governments, visible in their failure to provide adequate advisory services that provide farmers with comprehensive, co-ordinated approaches towards sustainable agriculture.”

Prof. Josef Sayer, Misereor

“Small-scale farmers choose sustainable agriculture as a survival strategy – to overcome high input costs and indebtedness, to reduce risks in production and to ensure food security... Most such farmers do not get any support from their governments. They do not have equitable access to education and health services. In most cases, insurance or credit facilities are not available to them. They are the ones who suffer most from volatile world market prices for commodities and are the ones who are already suffering from the impacts of climate change.”

Dr Rajeswari Sarala Raina, National Institute of Science, Technology and Development Studies, New Delhi

“One of the crucial things in real sustainable development is people. Large scale systems, like tomato greenhouses in the Netherlands (as referred to in your question), can be sustainable and can be very energy efficient production systems. But in India we have more than 200 million small-scale farmers. When you bring people into the equation such an approach is perhaps not so sustainable. Sustainability includes soils, natural resources, people and their capacities.” “Inclusive development is the alternative to the dominant sickness of growth. What makes it sick is that growth does not involve ecosystems. People and ecosystems have capacities. The whole range of features of resource-based development, its fundamental principles and relationships are ignored when we only talk about growth. We need to understand capacities and services.”
2 Sustainet: Goals and results

In 2003, the German Government founded Sustainet, the Sustainable Agriculture Information Network, as an integral part of its National Sustainability Strategy, adopted in 2002. The German Federal Ministries of Food, Agriculture and Consumer Protection (BMELV) and of Economic Cooperation and Development (BMZ) were involved, together with the Council for Sustainable Development (RNE) and a number of development organisations: GTZ, Brot für die Welt, Deutsche Welthungerhilfe and Misereor. The aim of Sustainet was to show the contribution that smallholder agriculture can make towards reducing hunger and poverty in developing countries and to change policies in favour of sustainable agriculture. From 2003 to 2009, Sustainet worked with local partner organisations in Kenya, Tanzania, Bolivia, Peru and India, documenting sustainable agricultural projects and approaches. These Good Agricultural Practices (GAPs) provided insights into the success factors and obstacles for sustainable agriculture and provided the basis for developing a scaling-up assessment tool. The partner organisations have jointly published papers and books outlining successful approaches to sustainable agriculture and made this literature available to interested decision-makers and farmers. Apart from the physical results, the numerous publications about good practices and the assessment tool, Sustainet has had a positive impact for networking and communication between farmers, partner organisations and policymakers. This networking has proved to be important both in Germany and the partner countries.

Dr Stefan Schmitz, BMZ

“First, we need networks like Sustainet and key actors to improve our internal communication. It provides a valuable learning network, a community through which we can communicate best practices. Second, Sustainet should act as a political advocate, to support the mobilisation of political will in our partners’ countries and to establish partnerships with civil society in these countries as well as in Germany and other western countries. And third, Sustainet should act as an advisory board to inform political decision making, to provide input to political decisions and the development of strategies.”
Dr Hans-Joachim Preuß, GTZ

“We share the same approaches and we have the same objectives that we want to promote in agriculture. What is ecologically, economically and socially sustainable can contribute to poverty reduction. And we also share a commitment to a participatory and gender sensitive approach. But these things are rarely taken up by local decision makers at whatever level. We have very strong networks with NGOs in partner countries, as well as in Germany and other western countries. There are very different ways of furthering this vision of sustainable agriculture: by having experts in international organisations and by giving advice to national governments, here and in our partner countries.”

Prof. Josef Sayer, Misereor

“The Council (for Sustainable Development) decided to set up this light house project not only to collect best practices in sustainable agriculture, but also to analyse the factors that hinder a broad up-scaling of the successful examples. The final objective is to convince decision makers to change their policies and support sustainable agriculture as means for effective poverty alleviation.”

Dr Alexander Schöning presented the results and lessons learned from Sustainet. Sustainet created an important alliance of major German governmental and non-governmental organisations and three pilot networks in East Africa, Asia and Latin America, which involved over 35 local NGOs. Sustainet developed a tool for evaluating sustainable practices and documented 39 Good Agricultural Practices (GAPs), ranging from agro-forestry to soil and water conservation, and dairy goat production. This information was used to develop an analysis of the relevant factors for scaling-up and the development of a tool for assessing the scaling-up potential of agricultural practices.

The pilot networks in India, Kenya, Tanzania, Peru and Bolivia facilitated the establishment of a communication platform for organisations at local, regional and international levels, to exchange information and experiences, and for lobbying. Analysis of the results shows that the success factors for scaling-up sustainable farming included:

• methods that are well suited, and can be adapted, to local requirements;
• an enabling environment (institutional and political framework);
• an economic framework that provides access to markets; and
• the attitude of producers: their openness to innovations and willingness to learn.
3 Sustainet in the eyes of regional teams

3.1 Africa Working Group

Tom Apina, Executive Secretary of Sustainet East Africa, started the working group session with a presentation of the results and challenges from Sustainet East Africa (EA), an independent NGO since 2008 (after the official withdrawal of the German partners) with five employees. Sustainet EA intends to continue and grow as a network, focusing on farmer based research and documentation, dissemination and scaling up of good practices, capacity building and lobbying. The main challenge facing sustainable agriculture in Africa is the need to increase food production. According to Mr Apina, this is not only a question of agricultural inputs, but also of equitable access to markets, food habits and having the infrastructure to disseminate and exploit knowledge and innovations. Stephen Kileo is programme coordinator in the Community Habitat Environmental Management programme (CHEMA). He presented the example of Good Agricultural Practice in organic pineapples in Karagwe, Tanzania. Training and support have improved the situation for small farmers: they have better and more stable prices for their pineapples and they have made greater investments in pineapple production and improved soil fertility. There are now less bush fires and the women and the youth have been economically empowered.

Discussions in the working group focused on the role of the government in extension and informing farmers, the profits and interests of different stakeholders in conservation projects and the aim of continuing Sustainet EA.
The following issues were reported back to the plenary:
• the main driver for the success of sustainable agriculture is that people see an (economic) benefit;
• the importance of combining the interests of different groups e.g. marketing for income generation.

Networking helps:
• to share experiences: farmers’ knowledge and innovations are in place, but need documenting;
• to give a stronger voice to farmers, which makes them able to influence (agricultural and economic) policies through lobbying and advocacy; and
• to inform people about good practices and about existing policies, rights and laws, which gives them the strength to claim their rights.

The Africa working group stressed that sustainable agriculture also depends on involving the youth in agriculture and them seeing a future for themselves in farming. The role of NGOs in promoting good practices in sustainable agriculture should be that of facilitator and catalyst.

3.2 Asia Working Group

Dr Poonam Pande, working for GTZ India presented the results and challenges of Sustainet India. The big challenge in India is in the enormous number of poor small-scale farmers who are being pushed towards intensive agriculture with mono-cropping and a heavy use of external inputs. In general, farmers are not enough aware of the alternatives, and there is a lack of synergy, linkages, capacity and finance to explore them. Sustainet India has created a communication platform for twelve organisations to share their knowledge and experiences about Good Agricultural Practices and to lobby for sustainable farming.

Dr Sabu Milton Simon of the Peermade Development Society in India, presented the case of linking tea and spice farmers with markets in Kerala. By coming together in an organisation the farmers were able to bargain for better prices for their products and for inputs. They also organised organic certification together, which opened new and more stable markets for them.

The workshop discussions first focused on the definition of sustainable agriculture, a definition which depends on the specific features of an area: it is not only about organic or ecological farming, but also includes social aspects and markets.

In the plenary, Dr Poonam reported that there is a need:
• to exchange best practices/technical knowledge and solutions for farmers in the field;
• for a platform to lobby for sustainable agriculture at different levels;
• to bring together policy makers, NGOs and academics;
• for curricula for sustainable agriculture in universities and delivery through extension agencies;
• to promote participatory research on sustainable agriculture; and
• to find appropriate sources of finance.
3.3 Latin America Working Group

The discussions in this group were stimulated by the presentation of the work of two of the Sustainet partners in this region: Renato Rios’ organisation Desarrollo Rural Sustentable (DRIS) in Peru, and the Bolivian organisation Centro de Investigación y Apoyo Campesino (CIAC) (presented by Juan de Dios Romero). The results achieved by these two and the other partners helped participants identify the most key factors that support and hinder the scaling up of sustainable agriculture practices. Among the former, they all agreed on the importance of documenting their work and sharing it with others. This also created the possibility of developing a shared vision. Other participants also mentioned the support of donors, or the importance of local laws and regulations.

At the same time, all the project partners had experienced difficulties, some of which were contextual (such as drug trafficking in Peru). It emerged that the main limitation to scaling up is insufficient documentation of most experiences.

The groups identified a number of success factors that need to be in place for scaling up to occur in the region:

- donors to promote good practices;
- appropriate local laws and regulations;
- cooperation with ministries of health and education;
- work with and build local organisations;
- take into consideration local customs and traditions;
- systematisation.

The workshop’s discussion went on to consider future activities and the different roles of different stakeholders. Among these, the group considered that:

- local organisations in Peru and Bolivia should develop bi-national projects that cover both countries;
- they all should assign a specific budget for documenting experiences, and ensure that this occurs;
- local organisations should try to involve farmers in all their activities;
- donors should narrow their focus, looking at sub-topics within the broad category of sustainable agriculture (such as climate change);
- donors should also support and seek to strengthen existing networks;
- researchers should pay attention to participative impact evaluation processes.
The Sustainet programme aimed to find ways to scale up sustainable agriculture through documenting and disseminating information about Good Agricultural Practices. Many lessons have been learned by all who participated in the programme. The working group for Latin America, identified some factors that hindered scaling-up within the region. Most of these are applicable for the other regions too: a lack of documentation of good practices, a lack of investors in sustainable agriculture and the withdrawal of donors, context-specific problems (e.g. drug trafficking or machismo) and projects that do not match institutional aims.

This implies that scaling-up sustainable farming not only involves sharing knowledge about the technical aspects of sustainable agriculture, but also requires attention and interventions in other fields. The Sustainet report identified five areas for future actions, and specific measures for each one. Further measures were proposed during the session by the different working groups (added per area for action):

**Politics in partner countries**

- create an enabling framework;
- avoid negative impacts on local markets from imports;
- reduce subsidies for high-input systems;
- provide access to services and infrastructure;
- secure soil and water rights;
- support the diversification of agriculture;
- create awareness about sustainable products;
- make payments for environmental services.

- present bi-national proposals;
- promote farmer to farmer exchanges of experiences;
- set aside a specific budget for documentation / systematisation;
- go from documentation to knowledge management (learning from success stories);
- facilitate dialogue/exchange between project partners.
Politics in Germany and Europe
• reduce trade distortion and export subsidies;
• sustainable agriculture as a standard for bilateral cooperation.

- identify more specific sub-topics (e.g. climate change);
- consider best practices based on local knowledge.

Private sector
• integrate sustainability in value chains;
• treat small scale producers as partners;
• certification of organic products as opportunity to open new markets.

Organisations of development cooperation
• socio-cultural aspects and ownership should be mainstreamed;
• emphasise the importance of smallholders in development cooperation;
• support farmer cooperatives and associations;
• strengthen entrepreneurship;
• promote local processing;
• consider requirements for scaling-up from the start;
• improve access to loans;
• improve the competences of advisory services.

- continue supporting those experiences validated by Sustainet;
- maintenance of web-sites;
- coordinate goals & visions between donors;
- consider existing networks & platforms;
- facilitate dialogue/exchange between project partners.

Research
• facilitate participatory research to build on indigenous knowledge;
• help small scale farmers adapt to climate change;
• develop tools to measure sustainability.

- participative impact evaluation.

Dr Alexander Schöning, GTZ
"What we saw in Sustainet is that the socio-economic aspects are very important. The 39 examples show that technologies are there. But up-scaling itself remains an issue. On the other side, research never ends; there are always new questions to be answered. In Sustainet’s report, only one section deals with the natural sciences and another focuses on socio-economic and political questions. Up-scaling needs an enabling environment.”
During the conference the presentations and discussions focused on the success factors and obstacles for scaling-up sustainable farming. An analysis of the results of Sustainet, identified future areas of action, which are presented in the report “Sustainable Smallholder Agriculture – Good Practices”. These were discussed during this conference. Maren Kneller of BMZ spoke of a new concept of German development policy, which strongly resembles the findings of the Sustainet programme. Further collective thinking and action could lead to even more effective up-scaling and mainstreaming sustainable agriculture.

Maren Kneller, Policy Advisor on Rural Development and Global Food Security, BMZ

“I was impressed by the experiences of Sustainet: the number of organisations involved and the number of papers published. These constitute an impressive stock of knowledge, which has come at the right time. Rural development is a central theme for the German government and sustainable agriculture is a key factor in this. The German government introduced a new strategy two weeks ago. There is a clear analogy between Sustainet and this new development policy concept.”

“Alleviating poverty and ensuring food security in rural areas contributes not only to the goal of halving the proportion of hungry people, but to the attainment of nearly all development goals. Looking at the final report of Sustainet I find many illustrating examples for this interrelationship. For instance, the cultivation of organic vegetables in Peru meant an improvement in farming families’ diets, better health and performance in schools, an increase in incomes and an improved position for women. But the case also shows the difficulties: the land given to women is often degraded, women have difficulty in accessing market, and infrastructure is lacking or inadequate.”
The new German strategy on rural development focuses on:

- Strengthening the role of the economy. In many partner countries agriculture is the most important economic sector, but there are also other sectors, in which value chains need to be developed;
- The sustainable management of natural resources and bio-diversity;
- Expanding services for improving living conditions: with a focus on the long term and especially for young people;
- Developing the institutional framework in partner countries. Secure access to water and land is a priority.

Beyond talking

Dr Hans Herren, President of the Millennium Institute, believes that there have been enough meetings and conferences and that it is time for action: "Why are we still talking? We know what to do. So let's go out and do it". In his speech he summarised the facts, figures and feelings about sustainable farming, which leaves little room for doubt: sustainable agriculture is a must.

Dr Hans Herren, President Millennium Institute

“In 2050 we will have problems with our global food production; we could easily feed twelve billion people now. But the transport is simply too costly. We can expect many problems in southern and Central America, Africa and Asia. So we have to do something, and we should have done it yesterday. Biodiversity loss is already 75 per cent and we will lose another ten per cent with each degree of temperature increase. People say we need 0 per cent more production to feed the world. Nonsense! We just waste too much (post harvest losses, too much fodder production, and food is too cheap in the West, so we buy too much and throw it away). In addition, we produce it in the wrong places. How do we make the transition to make food less cheap: that's a question for economists.”

Dr Herren drew attention to the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) which concluded in 2008 that the world needs a paradigm shift towards agro-ecological, sustainable, organic and resilient agriculture.

The key features would need to:
- recognise the central role of small family farms (social and economical);
- have a systemic / holistic approach;
- be part of the solution to hunger poverty and health;
- be part of the solution to climate change;
- provide connections between agriculture and the environment, consumers and farmers and policies and consequences;
- offer options for action: everything is connected, so people should sit and think together;
- be based on multi-functionality.
A wide range of interventions are required to up-scale sustainable family farming. According to Dr Herren it is crucial to adopt a systems approach, instead of the linear thinking about agriculture that exists at the moment.

**Other fields where action is required include:**
- empowering family farmer women;
- sharing knowledge about sustainable agricultural practices;
- improving management of ecosystem services;
- increasing crop, animal and labour productivity, through adaptation of appropriate mechanisation;
- promoting the diversity of crops, animals and systems;
- creating safety nets (e.g. through insurance etc).

### Why family farming?
- 1.5 billion peasants on 380 million farms
- 800 million people with urban gardens
- 410 million people gathering the ‘hidden’ harvest of forests and savannas
- 190 million pastoralists
- 100 million peasant fishers
- In addition 370 million of these are indigenous people

Following the presentations, a panel of six experts talked about the way forward and the policy implications of scaling up sustainable agriculture.

### Panel discussion

**Mirjam Gehrke:**
*Dr Hans Herren sounds very convincing: let’s just go out and do something. Is it that simple?*

**Nivedita Varshneya:** I think government policy and institutions are a problem, at least in India. There are subsidies that benefit mainly big farmers and there is a strong fertiliser lobby. These big companies influence and steer agrarian policy making. We have to lobby a lot there. We know that
grassroots organisations and farmers really want sustainable agriculture: they want it locally and with low external input use, but they need to gain confidence in markets and local institutions.

**Christian Henckes:** But how to influence government? Maybe it is not even the main problem, there are just shortcomings. Though agriculture is mainly driven by private actors and markets, we have to keep in mind that governments must be part of the solution, especially in the case of public services such as payment for environmental services, education and infrastructure. So governments have an important role to play and need to establish mechanisms to provide the necessary financial resources.

**Research**

**Mirjam Gehrke:** What is the role of research institutions, how do they deal with local knowledge and can local solutions be the answer?

**Franz Heidhues:** Yes, poor areas are often remote, mountainous, inhabited by people with different cultural beliefs, and they are enormously complex because of their ecological, economic and sociocultural diversity. Therefore, local people need to become part of the research process. Participatory research is a very important instrument. But there are pitfalls: for instance that of only talking to elites and not including the poorest. Participatory research is not easy and needs to be done in the right way.

**Hans Herren:** Agriculture is localised in nature and very diverse, even sometimes on one farm. Just give farmers information and they will experiment. Visit them from time to time to see what has developed. That is the way to promote innovations, all kind of innovative things will come up.

**Franz Heidhues:** In participatory research local knowledge is integrated. I have met many scientists who were sceptical in the beginning, but they have experienced how their on-station research can be usefully complemented by local knowledge.

**Thomas Apina:** We should not forget that local problems should be central in guiding the research that will empower farmers. In Kenya, access to land is problematic. People want land reforms, have agrarian policies adopted and see agriculture as a respected sector. The problem is about human rights and good governance: the rights of small-scale farmers need to be taken into account. You can do that through involvement of stakeholders and by continuing participatory research and advocacy.

**International policies**

**Mirjam Gehrke:** Can international development cooperation do something?

**Wolfgang Jamann:** The international policy dialogue is complex with many parties talking to each other. We have a multifaceted problem, for food security is an inequality problem. It is good that we don’t only talk about production. The problem is that food is too cheap, and that people do not want to pay more. Education and subsidies could change this.

**Hans Herren:** We need democracy, and power should not be monopolised by people with money. Land grabbing can be stopped by responsible governments, and should be. For there is nowhere where the land is not used. Gulf states and other countries that go out to get land should be forced to invest in farmers and increase productivity. But the countries involved are undemocratic, and there is a role for the UN and major agencies like the World Bank and IMF to play.

**Thomas Apina:** Another problem is that of the new poor generation without any/ enough income, will agriculture give them a good enough quality of life? We have farmers for whom agriculture is their main source of income. But most are facing declining productivity, and agriculture does not provide them with enough income. With prices going down, cereal production often does not make enough to cover the input costs.
**Wolfgang Jamann:** I think we should acknowledge more that food production occurs in rural areas. Rural development is different than agrarian development. Rural people need services too, therefore you should talk about rural development.

**Franz Heidhues:** Agriculture has only limited resources available, but there is ever increasing demand for these. This means we need to find solutions beyond agriculture. Research should look at the role of other sectors. But there is another danger for food security of the poor, the volatility of markets, which is linked to land grabbing and climate change. Supply shocks are predicted to happen more often, with extremely large price fluctuations. This mostly affects the poorest people, for they cannot adapt to price fluctuations. We also observe that countries and traders don’t trust the world food market to provide the food needed. They try to secure food by buying land in other countries. We need intelligent solutions for stabilizing world food markets.

**Nivedita Varshneya:** Maybe we should look at women for that? India has shown good examples of Self-Help groups, small saving and credit groups. These could be adapted and up-scaled to improve the financial situation and reserves of farming families.

**Questions from the audience:**

*Is population growth a non issue?*

**Hans Herren:** Population growth is an issue that we should be aware of. In China people are afraid for their future in terms of labour and social security. We should take this into account on country level. Even the Vatican has been posing the question! We need better information to link this with what we do.

*What is the way ahead for Sustainet?*

**Nivedita Varshneya:** The individuals and groups involved in India will continue, not as a group. But I hope that we keep this platform.

**Thomas Apina:** East Africa was slow in picking up the Sustainet idea. But now the members have registered Sustainet as a formal NGO and the network has increased to twelve organisations. We will continue and look forward to developing new partnerships. There are many networks, but this one is unique in being involved in networking, advocacy and documentation of good practices in the East Africa region.

*Women do the work but they have no access to market and services. You are missing the point if you do not focus on gender relations. Is women’s empowerment not more important?*

**Nivedita Varshneya:** In India, addressing women’s rights and their access to resources has become an important issue. Child-mortality is critically related to the world hunger index. But the role of women is not just in the field, things are more complex than that. We should know how to deal with these diverse roles and adapt strategies for that. Education is very important and needs to be better aimed at women. Educate the girls and the men live longer!

*Sustainet has shown the importance of local people being empowered to take initiatives* (Maren Kneller, BMZ)
# Sustainable Agriculture – A Challenge for the 21st Century Conference Programme

**Facilitator:** Mirjam Gehrke, Deutsche Welle

## Day 1  23. November

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.30 - 10.30</td>
<td>Registration and Welcome Coffee</td>
</tr>
<tr>
<td>10.30 - 11.10</td>
<td>Official Opening and Introduction</td>
</tr>
<tr>
<td>Dr Stefan Schmitz (Head of Division “Rural Development and Global Food Security”, Federal Ministry for Economic Cooperation and Development)</td>
<td></td>
</tr>
<tr>
<td>Dr Hans Preuß (Managing Director of GTZ)</td>
<td></td>
</tr>
<tr>
<td>Prof. Dr Sayer (Director General of Misereor)</td>
<td></td>
</tr>
<tr>
<td>11.10 - 13.00</td>
<td>Challenges and Approaches for Food Security and Agriculture</td>
</tr>
<tr>
<td>Keynote Speeches:</td>
<td></td>
</tr>
<tr>
<td>Dr Rajeswari Sarala Raina (National Institute of Science, Technology and Development Studies, New Delhi)</td>
<td></td>
</tr>
<tr>
<td>Challenges for Sustainable Agriculture in the 21st Century - A Perspective from India</td>
<td></td>
</tr>
<tr>
<td>Dr Alexander Schoening (Project Officer Sector Programme “Sustainable Management of Resources in Agriculture”, GTZ)</td>
<td></td>
</tr>
<tr>
<td>Scaling-up of Sustainable Agriculture – Lessons Learned from Sustainet</td>
<td></td>
</tr>
<tr>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>13.00 – 14.30</td>
<td>Lunch</td>
</tr>
<tr>
<td>14.30 - 16.30</td>
<td>Good Practices in Sustainable Land Use and Hindering and Supportive Factors for their Scaling-up</td>
</tr>
<tr>
<td>3 Working Groups: Africa, Asia, Latin America</td>
<td></td>
</tr>
<tr>
<td>Keynote presentations by Sustainet partners from:</td>
<td></td>
</tr>
<tr>
<td>Kenya/Tanzania: Tom Apina, Stephen Kileo</td>
<td></td>
</tr>
<tr>
<td>India: Dr Poonam Pande, Sabu Milton Simon</td>
<td></td>
</tr>
<tr>
<td>Peru/Bolivia: Juan de Dios Romero Condori, Josue Renato Rios Alvarado</td>
<td></td>
</tr>
<tr>
<td>Coffee break integrated into group work</td>
<td></td>
</tr>
<tr>
<td>18:00</td>
<td>Dinner and Reception</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>9.00 - 9.30</td>
<td>Presentation of Group Results</td>
</tr>
</tbody>
</table>
Cross-sectoral Concept: The Development of Rural Areas and its Contribution to Food Security |
| 10.30 - 11.00 | Coffee                                                                |
| 11.00 - 12.45 | Panel Discussion:  
Sustainable Agriculture – Way Forward and Policy Implications |
|             | Dr Wolfgang Jamann (Chairman Welthungerhilfe)                         |
|             | Dr Christian Henckes (Head of Section “Agriculture, Fisheries and Food”, GTZ) |
|             | Nivedita Varshneya (Welthungerhilfe India)                             |
|             | Tom Apina (Sustainet East Africa)                                     |
|             | Dr Hans Herren (President Millennium Institute)                       |
|             | Prof. Dr Franz Heidhues (Hohenheim University)                        |
| 12.45 – 13.00 | Closing                                                               |
| 13.00 – 14.00 | Lunch                                                                 |

End of Conference
# Sustainable Agriculture – A Challenge for the 21st Century

## Participants

<table>
<thead>
<tr>
<th>Surname</th>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apina</td>
<td>Tom</td>
<td>Sustainet East Africa</td>
</tr>
<tr>
<td>Arikal</td>
<td>Jasmin</td>
<td>Welthungerhilfe</td>
</tr>
<tr>
<td>Armbruster</td>
<td>Dr. Paul</td>
<td>DGRV</td>
</tr>
<tr>
<td>Aviles</td>
<td>Dr. Denis Lucy</td>
<td>Consultant</td>
</tr>
<tr>
<td>Barthelmes</td>
<td>Ralf</td>
<td>Deutscher Entwicklungsdienst gGmbH</td>
</tr>
<tr>
<td>Beck</td>
<td>Tobias</td>
<td>Welthungerhilfe</td>
</tr>
<tr>
<td>Braun</td>
<td>Dorothee</td>
<td>Rat für Nachhaltige Entwicklung</td>
</tr>
<tr>
<td>Cammann</td>
<td>Lueder</td>
<td>InWEnt</td>
</tr>
<tr>
<td>Chavez-Tafur</td>
<td>Jorge</td>
<td>ILEIA AgriCultures Network</td>
</tr>
<tr>
<td>Chinyamakobvu</td>
<td>Emmanuel</td>
<td>UNCCD</td>
</tr>
<tr>
<td>Dang</td>
<td>Duy Minh</td>
<td>Uni Bonn</td>
</tr>
<tr>
<td>Davila</td>
<td>Emily</td>
<td>Mission Talent</td>
</tr>
<tr>
<td>Dembek</td>
<td>Anna-Christina</td>
<td>Bonn University</td>
</tr>
<tr>
<td>Dickmann</td>
<td>Marlene</td>
<td>GTZ/BEAF</td>
</tr>
<tr>
<td>Emundts</td>
<td>Alexa</td>
<td></td>
</tr>
<tr>
<td>Escher</td>
<td>Julia</td>
<td>Welthungerhilfe</td>
</tr>
<tr>
<td>Fechter</td>
<td>Jürgen</td>
<td>KfW Entwicklungsbank</td>
</tr>
<tr>
<td>Gehrke</td>
<td>Mirjam</td>
<td>Deutsche Welle</td>
</tr>
<tr>
<td>Geier</td>
<td>Bernward</td>
<td>COLABORA</td>
</tr>
<tr>
<td>Haas</td>
<td>Dr. Guido</td>
<td>AgroExpertise Consultancy</td>
</tr>
<tr>
<td>Hagemann</td>
<td>Dr. Hildegard</td>
<td></td>
</tr>
<tr>
<td>Handschuh</td>
<td>Christina</td>
<td>Georg-August Universität Göttingen</td>
</tr>
<tr>
<td>Heidhues</td>
<td>Prof. em. Franz</td>
<td>Hohenheim University</td>
</tr>
<tr>
<td>Henckes</td>
<td>Dr. Christian</td>
<td>GTZ</td>
</tr>
<tr>
<td>Henke</td>
<td>Catarina</td>
<td>Bonn University</td>
</tr>
<tr>
<td>Herberg</td>
<td>Lea</td>
<td>GTZ</td>
</tr>
<tr>
<td>Herren</td>
<td>Dr. Hans</td>
<td>Millennium Institute</td>
</tr>
<tr>
<td>Heuschkel</td>
<td>Zoe</td>
<td>“Vereinigung Deutscher Wissenschaftler”</td>
</tr>
<tr>
<td>Hoepner</td>
<td>Dr. Bernhard</td>
<td>Welthungerhilfe</td>
</tr>
<tr>
<td>Huber</td>
<td>Isabel</td>
<td>KfW</td>
</tr>
<tr>
<td>Humer-Gruber</td>
<td>Adelheid</td>
<td>GTZ</td>
</tr>
<tr>
<td>Isaza</td>
<td>Juan</td>
<td>Fairtrade Labeling Organization FLO</td>
</tr>
<tr>
<td>Jaenicke</td>
<td>Hannah</td>
<td>Consultant</td>
</tr>
<tr>
<td>Jamann</td>
<td>Dr. Wolfgang</td>
<td>Welthungerhilfe</td>
</tr>
<tr>
<td>Kileo</td>
<td>Stephen</td>
<td>CHEMA Programme</td>
</tr>
<tr>
<td>Kloecckner</td>
<td>Heike</td>
<td>Institute for Food and Resource Economics, University of Bonn</td>
</tr>
<tr>
<td>Kneller</td>
<td>Maren</td>
<td>BMZ</td>
</tr>
<tr>
<td>Kolmans</td>
<td>Alicia</td>
<td>Miserecor</td>
</tr>
<tr>
<td>Krall</td>
<td>Dr. Stephan</td>
<td>GTZ</td>
</tr>
<tr>
<td>Kurzweg</td>
<td>Diana</td>
<td>GTZ</td>
</tr>
<tr>
<td>Latzke</td>
<td>Ute</td>
<td>Welthungerhilfe</td>
</tr>
</tbody>
</table>