

Symposium on World Food Day

Universität Hohenheim and Heidelberger Akademie der Wissenschaften

16th October 2009

On October 16th the World Food Day Hohenheim hosted an international symposium on world food issues. With this academic event the Universität Hohenheim analogous to the other eight universities in Baden-Württemberg decided to celebrate the 100th anniversary of the Heidelberger Akademie der Wissenschaften. Amongst the other universities' contributions the Universität Hohenheim arranged a conference on a topic specifically relevant to Hohenheim: Food Security. About 450 people, many of them students, scientific staff and professors joined the event which took place in lecture hall B1.

The World Food Day was proclaimed in 1979 by the Conference of the Food and Agriculture Organization (FAO). It marks the date of the founding of FAO in 1945. The aim of the Day is to heighten public awareness of the world food problem and strengthen solidarity in the struggle against hunger, malnutrition and poverty. FAO estimates that in 2009, 1.02 billion people across the world suffer from hunger.

Rector Prof. Dr. Liebig opened the colloquium, welcomed the many distinguished guests and thanked the Heidelberger Akademie der Wissenschaften (Heidelberg Academy of Sciences and Humanities). Liebig explained the university's decision to arrange the conference on food security since this topic is very relevant to Hohenheim, dealt with by the three faculties and its scientific centres. In this context Liebig mentioned the newly established competence centre called "Food Security Centre". Since the foundation of the university food security has always been a prominent subject and the university committed itself to combat hunger and poverty. At the time of its foundation in 1818 this obligation was oriented more to this region – today Hohenheim works on global hunger issues.

Liebig emphasised that the challenges lying ahead are similar to those that led to the foundation of the university, when the climate changes caused by the eruption of volcano Tambora in Indonesia in 1815 resulted in crop failures and famine in Germany and other parts of Europe.

The rector expressed his thanks that excellent experts had accepted the invitation, allowing different points of view on the topic and especially welcomed Professor Patrick Webb, former Chief of Nutrition for the UN World Food Programme and Professor Ernst Ulrich von Weizsäcker, chair of the International Panel for Sustainable Resource Management at UNEP as key note speakers.

He further introduced Ms. Ingar Brueggemann, representing the Deutsche Stiftung Weltbevölkerung (German Foundation for World Population) on behalf of Renate Bähr, and Professor Albrecht Melchinger, Chair of Plant Breeding, an expert in genetic engineering, replacing Prof. Hahlbrock, who had to cancel his participation at short notice. Next he welcomed Michael Windfuhr, Human Rights Director at Brot für die Welt (Bread for the World) and the sixth member of the panel discussion, Professor Manfred Zeller, Chair of Rural Development Theory and Policy and Director of the Food Security Centre. Prof. Liebig further introduced Dr. Martin Kilgus, Vice Head of SWR International, as moderator of the panel discussion.

Liebig announced the award ceremony of the Justus von Liebig Award and said that Hohenheim is very happy to host the ceremony. The award is for the first time donated by the



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Eiselen-Stiftung. The Eiselen-Stiftung and especially Dr. Hermann Eiselen, the university's Senator of Honour, have supported and funded many important projects at the university during the last decades. Combating hunger in the world was Dr. Eiselen's very guiding principle and is to be continued by the Eiselen-Stiftung and the Universität Hohenheim. On June 21 this year Senator of Honour Dr. Eiselen has passed away after a short period of illness. Hohenheim mourns Dr. Eiselen and Liebig notified that Professor Heidhues will commemorate him on the occasion of the World Food Day. Finally he thanked the colloquium's donators and stressed the generosity of the Senators of Honour Karl Strenger and Günter Daiss as well as the Eiselen-Stiftung. They have made this colloquium reality. He then handed over to Prof. Silke Leopold from the Heidelberger Akademie der Wissenschaften (Heidelberg Academy of Sciences and Humanities).

In her address of welcome Prof. Silke Leopold first apologised for Prof. Dr. Hahn, director of the academy, who could not personally represent the Academy, because he had an accident the day before. Prof. Leopold expressed her gratitude to the Universität Hohenheim for hosting this event in honour of the Akademie and acknowledged Hohenheim's contribution in combating hunger.

Heidelberg Academy of Sciences and Humanities

The Heidelberg Academy of Sciences and Humanities was established in 1909 and throughout its existence the Heidelberg Academy has upheld its allegiance to the purpose for which it was originally constituted: assembling the outstanding scholars and scientists of the state of Baden-Wuerttemberg for cross-disciplinary exchange and independent research. Like the seven other German Academies of Sciences and Humanities, the Baden-Wuerttemberg State Academy in Heidelberg is both a scholarly society in the traditional sense of the term and a modern, independent research institution. The Academy organises scholarly and scientific symposia and public lecture series. At the same time it is dedicated to the encouragement of young scholars and scientists.

The Academy serves its members as a forum for regular interdisciplinary discussion of findings and insights generated by academic research. The full members of the Heidelberg Academy are scholars and scientists from the state of Baden-Wuerttemberg elected on the basis of their outstanding achievements in the fields they represent. In addition, the Members' Assembly can elect corresponding members from all over the world. The Academy is subdivided into the Philosophical-Historical Section and the Mathematical-Scientific Section. In its work the Academy concentrates on long-term basic research.

Among the scientific projects exemplifying this approach is a Research Project working on the reconstruction of climatic fluctuations in the course of the history of the Earth, while another is concerned with the provision of tectonic stress maps of the Earth's crust in its present state. In the humanities the Academy contributes to the preservation of our cultural heritage with a variety of projects including critical editions of the works and correspondence of major thinkers and the compilation of a number of dictionaries satisfying the most exacting lexicographic standards. In this way the Academy supplies a reliable fund of knowledge that can be drawn upon by other scholars and scientists active in a research or teaching capacity and by the public. As a state institution the Heidelberg Academy is funded primarily by the state of Baden-Wuerttemberg.



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Key note speech Professor Patrick Webb

Patrick Webb is Dean for Academic Affairs and Professor at the Friedman School of Nutrition Science and Policy at Tufts University in Boston, and former Chief of Nutrition for the UN World Food Programme (to August 2005). Professor Webb spent six years living in Africa (Ethiopia, Niger, The Gambia), and many more years working in remote parts of Asia and Latin America on program implementation and evaluation in the field of food security. He has served on expert panels for UNICEF and WHO and advised the Gates Foundation on agricultural policy and global nutrition strategy. Currently he is principal investigator for USAID's food aid quality review. From 1996 to 1998 he was Professor in Hohenheim (endowed professorship).

From food aid to food security: The role of policy and science to overcome hunger and malnutrition amid the financial crisis and climate change

Patrick Webb started off in his presentation showing that even before the combined food and economic crises, the number of undernourished people in the world had been slowly but steadily increasing. While before the crisis, the long-term downward trend in agricultural commodity prices was seen as threat to the food security of hundreds of millions of people, the price crisis focused attention on the sharp rise in commodity prices. Webb also pointed out that never before so much food has been produced on the planet; but never before there have been so many chronically undernourished people as well.

Taking these factors into account, one needs to acknowledge that the call for higher productivity leaves out other aspects, such as the shift in dietary pattern to processed food and beverages even in the remotest rural areas in least developed countries, the increased use of crop output as feed to meet the rising demand for animal products and high levels of food waste. Webb showed that although the overseas development assistance (ODA) commitments have increased in recent years, the share for agriculture has been diminishing. Furthermore, he drew attention that the overall share of ODA commitments is not going to least developed countries, but to countries such as China, etc.

Summing up, Webb stressed the role of science to increase productivity but on a sustained and more resource-efficient basis. He therefore calls for more research in public goods meaning crops of the very poor and in human capital. There is a huge potential for science to enhance food quality (processing, storage, enrichment) and to put more efforts into research on plant resistance to salt, drought, flood, diseases, pests and the mitigation of progressive climate change (ecosystem shifts). Webb emphasized that the countries already suffering from hunger are hit most severely by climatic change.

Webb pointed to the crucial role of policy in providing productivity incentives and to foster capital investment in extension services, research and human capital. Consumption patterns need to be put on a sustainable track through education, training and price policy, and social protection focusing on income and asset protection, but also on consumption smoothing and enhancement of the nutritional value of food.

Webb underlined that we are not only dealing with agricultural systems, but that food systems are central to the issues and that there should be no tradeoffs between food aid and food



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security. He showed that policy ‘re-’action drives the crises and that what governments do or not do between crises often determines what can happen during crises. Patrick Webb argued that policy matters to both the solution, as well as the problem, of hunger. He finally recommended that safety-net interventions should address the immediate impact on the vulnerable, while also providing sustainable solutions to the underlying problems.

During the panel discussion, Webb emphasised that the fact that hunger was increasing even before the food and economic crises suggests that present solutions are insufficient. We need a new approach towards development strategies to ensure that the right food comes to the right people at the right time. When asked how to start a policy change he argues that the ultimate demand for a change has to come from the people themselves, but when people want to lift themselves out of hunger they need control over resources, access to opportunities, and improved governance at the international, national and local level.

Commemoration of Senator e.h. Dr. Dr. h.c. Hermann Eiselen

Prof. Heidhues emphasised that there was no better and no more opportune day to commemorate and acknowledge Dr. Hermann Eiselen’s work at the World Food Day, because Eiselen had devoted his life, his energy and his resources to the fight against hunger and poverty in the world. He was convinced and he emphasized many times that - and Heidhues quoted “ freedom from hunger is the most fundamental human right”.

Heidhues highlighted that Dr. Eiselen, who was born 83 years ago, in Nagold, a rural town in the northern part of the Black Forest, grew up in a strict “württembergisch” – protestant family environment where hard work, industriousness, reliability and trustworthiness were the guiding principles in the education of children; these principles decisively formed him and his life. At the age of 16 to 19 years he experienced the horrors of war, the injustices, the misery, poverty, hunger and death that war brings along. This had a profound impact on him, particularly when he subsequently learned that poverty and hunger were not limited to war-end Germany, but were an enormous problem world-wide. According to Heidhues the two experiences together probably go a long way to explain Dr. Eiselen’s devotion to fight hunger and poverty in the world.

In 1978 he founded the “Vater und Sohn Eiselen-Stiftung Ulm”, to promote food and nutrition security for all through the support and funding of research, particularly agricultural research, through supporting education and training of young scientists working on these issues, and through fostering incentives for successful research and innovation development in the form of prize awards. Moreover he founded together with his father, the “Deutsches Brotmuseum” that in 2000 became the “Museum für Brotkultur”, the oldest and nationally and internationally most renowned museum devoted to the history of bread and its meaning for human culture. For his invaluable service in supporting agricultural research and education and promoting the understanding of – and sensitivity for - poverty and hunger, Dr. Eiselen received highest honours and awards which to mention individually, Heidhues argued, would exceed the time available and he thus pointed out the four particularly important activities of Dr. Eiselen’s fight for a world without poverty and hunger.

The Research and Education Support Programmes of the Eiselen-Stiftung funded diverse research and teaching initiatives at the Universität Hohenheim with a total amount of over



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10 million Euros. In this category the Foundation also supported the Diploma/Masters Scholarship Program, under which 520 Diploma and Master theses with a total amount of 1.1 million Euro were funded. Heidhues further gratefully acknowledged the funding of important international symposia, award and prize programmes, and particularly referred to the “Josef G. Knoll Visiting Professorship for Development Research” which was privately funded by Dr. Eiselen and gave a tremendous input to Hohenheim’s Rural Development Research. The first appointed professor to the so-called “Stiftungsgastprofessur” was Prof. Patrick Webb, one of today’s key note speakers.

Heidhues pointed out that the Foundation has resisted the general trends towards increasing bureaucracy in filling out forms, sheets and complying with other formalities. The application and approval processes are content focused, simple and short. The emphasis is on research that produces farmer relevant and applicable results.

When evaluating the impact of these support programs on the hunger and poverty situation in the world, Heidhues elaborated that two aspects suggest the Foundation’s programme to be highly effective. Eiselen focused on the two most important ingredients of development, namely human capital formation, i.e. education and training; and production of knowledge, i.e. agricultural research, particularly for the poor. He concluded that the Eiselen-Stiftung can look back at a highly valuable and successful support program.

He expressed the gratefulness of all Hohenheim researchers that Dr. Eiselen took the initiatives and translated them into action. He also stressed that the university looks forward to a continuation of the Foundation’s important work under its new Director Dr. Andrea Fadani.

Award of the Justus von Liebig Prize for World Nutrition

The Justus von Liebig Prize for World Nutrition 2009 was awarded to Godrick Khisa, a Farmers Field School Specialist from Kenya. The prize is endowed with 25,000 Euro by the Eiselen-Stiftung Ulm. Godrick Khisa’s achievement has been to introduce Farmer Field Schools (FFS) to Kenya in 1995, to adapt the methodology, originally developed in Asia to respond to local farming conditions and needs. Through his work he engaged more and more people in the FFS movement and made a significant impact on food security not only in his own country, but throughout East Africa and beyond.

In his laudatio **Prof. em. Dr. Hartwig de Haen**, former Assistant Director-General of FAO, pointed out that improving the productivity of smallholder agriculture is the key to sustainable development in most African countries and that Godrick Khisa is exactly working in this field. The Farmer Field School (FFS) is a group-based learning process. These activities involve simple experiments, regular field observations and group analysis. The knowledge gained from these activities enables participants to make their own locally-specific decisions about crop management practices. More recently the subject matters dealt with by Farmers Field Schools have gone far beyond agronomic practices and include issues like marketing, fisheries or rehabilitation after natural catastrophes. This approach represents a radical departure from earlier agricultural extension programmes, in which farmers were expected to adopt generalized recommendations that had been formulated by specialists from outside the



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community. The Farmer Field School (FFS) was originally designed for integrated pest management in rice by the FAO in 1989. Most schools involve farmer-run experiments, the results of which are shared with other farmers during field days. Kenyan farmers created a self financing model in which they would collectively work on a plot during the first year so as to generate income that would then be used to finance a continuation in the following years, so that they were no longer dependent on outside financial assistance. Increasingly FFS are being facilitated by farmers who themselves are FFS graduates.

When acknowledging the award Godrick Khisa emphasised that the award is a great source of encouragement to him and all those involved in the movement, because it demonstrates that their work is internationally recognised.

The Justus von Liebig Prize for World Nutrition was originally endowed by the Alfred Toepfer Foundation and awarded regularly between 1949 and 2006. During that period, the prize was awarded to 76 distinguished individuals who had made outstanding contributions to the science and practice of agriculture. Now the Eiselen-Stiftung continues the award with a slightly modified aspiration, beginning in 2009. Individuals who have made preeminent contributions to the improvement of world food supply, the mitigation of under- and malnourishment, or the improvement of rural livelihood while preserving natural resources are eligible to be nominated. There are no national or other limitations, and the prize can be awarded for both, singular achievements and lifetime accomplishments.

Key note speech Prof. Ernst Ulrich von Weizsäcker

Ernst Ulrich von Weizsäcker, German scientist and politician, is the chair of the International Panel for Sustainable Resource Management at UNEP. Author of the books: *Factor Four: Doubling Wealth, Halving Resource Use* (1995) and *Limits to Privatization*. He was founder and president (1991-2000) of the Wuppertal Institute and is member of the Club of Rome since 2001. Between 1998 and 2005 he was member of the German Parliament. From 2005-2009 he was appointed dean of the Donald Bren School of Environmental Science and Management at the University of California, Santa Barbara.

Food and Resources

Von Weizsäcker came in, after just having attended the launch of the first assessment report of the International Panel for Sustainable Resource Management in Nairobi, via a climate-friendly video conference from Hohenheim.

The International Panel for Sustainable Resource Management (IPSRM), or Resource Panel in short, was officially launched in November 2007 and is expected to provide the scientific impetus for decoupling economic growth and resource use from environmental degradation. The overall objective of the Resource Panel is therefore to provide independent scientific assessment of the environmental impacts due to the use of resources over the full life cycle, and advise governments and organisations on ways to reduce these impacts.

According to von Weizsäcker all five working groups of the Panel, i.e. biofuels, metals, decoupling, water and prioritisation are relevant to agriculture and thus to food security. The first report on biofuels does not deliver a final word, but a review of the state of the art,



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aiming to support decision making and future scientific work towards a sustainable 'bio-economy'. Biofuels can reduce global greenhouse gas emissions, but not all biofuel use leads to cuts in greenhouse gases. The processes of growing and conversion of biomass to fuel determine each biofuel's environmental performance and whether a biofuel is climate-friendly or contributes to climate change depends on whether it is based on crops or production residues and waste, the report concludes.

The prioritisation group will look into which sectors and which habits are really important for sustainable resource management. The metal group studies scarcities and strategies including city mining. The decoupling group looks into more wealth through less resource use and may come up with proposals for active regimes of raising commodity prices including energy prices. Absolute decoupling applies mostly to rich countries and relative decoupling chiefly to developing countries.

Von Weizsäcker argued that we must succeed in establishing cost transparency in our economic system. He said „the price has to tell the truth” and subsidies for transport, water and high-input farming must stop. In most countries, for example, water has no price tag for agriculture. Von Weizsäcker's agenda is the Factor Five vision, urging a dramatic improvement in energy and resource productivity. In other words, the vision of five times more resource efficient technologies!

According to von Weizsäcker the report on the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) outlines shortcomings in an appropriate way. The IAASTD report is of such high relevance because it puts food production in the context of its economic, environmental and social settings and demands. The report calls for retooling Agricultural Knowledge, Science and Technology (AKST), to meet the requirements of a multifunctional agriculture. It takes into account that food security goes much beyond sufficient production and it strongly recommends to stop subsidising unsustainable production.

In the panel discussion von Weizsäcker also revealed what he calls “production irony” that we are talking of bumper harvests on the one hand and on the other confine the global hunger problem to productivity issues only.

Before starting off with the panel discussion, **Prof. Manfred Zeller** introduced the newly founded Food Security Center to the audience.

The newly founded Food Security Center (FSC)

In 2009, the Universität Hohenheim and its Tropenzentrum (Centre for Agriculture in the Tropics and Subtropics) participated in a call of the German Academic Exchange Service (DAAD) for "Higher Education Excellence in Development Co-operation", and submitted a proposal for the establishment of a Food Security Center (FSC). The Universität Hohenheim was amongst the five winners of the nationwide competition for excellence in development cooperation with regard to the Millennium Development Goals. The Centre will receive about five million Euro under DAAD's so-called EXCEED programme. The FSC will focus on Millennium Development Goal (MDG) 1 and here particular on the eradication of hunger and



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malnutrition. The strategic objective of the FSC is to provide innovative and effective, scientific contributions to reduce hunger and achieve food security, and thus to make progress towards reaching MDG 1.

“Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary need and food preferences for an active and healthy life (FAO, 1996).

Thematically, the FSC will be concerned with (sustainable) food availability, (economic) food access, and food use. Additionally, in the context of food security, special emphasis will be given to the role of gender and to the ecological sustainability of food production in the tropics and subtropics. In the framework of the Universität Hohenheim, the FSC will be supported by all three faculties and will closely work with the existing centres, namely the Life Science Center, the Centre for Nutrition and Gender and above all the Centre for Agriculture in the Tropics and Subtropics. In order to achieve administrative efficiency and synergy the management and the advisory boards will be shared by FSC and the Centre for Agriculture in the Tropics and Subtropics.

The FSC will build upon the rich partnerships of the Tropenzentrum in the developing world. It will collaborate with six networks in Africa, Asia and Latin America. In each of the three continents, both a university and a network partner have agreed to join the FSC network. Strategic partners are RUFORUM, a network of 25 universities in Africa, the University of Costa Rica and the Kasetsart University in Thailand. The other main partners are the SUA, Sokoine University of Agriculture in Tanzania, CATIE from Costa Rica, a major regional player in tropical agriculture and SEARCA, the Southeast Asian Centre for Graduate Study and Research. The FSC initiative is further supported by GTZ and KfW and Germany based NGOs such as the Welthungerhilfe, Brot für die Welt, FIAN and the Eiselen-Stiftung as well as several CGIAR centers.

The center engages in five areas of activity, namely (1) interdisciplinary teaching and training of postgraduate students (largely from developing countries) in relevant fields by establishing a PhD Program of excellence at the Universität Hohenheim and by strengthening selected MSc and PhD programs in the field of food security at partner universities, (2) innovative, demand-driven and impact-oriented research, (3) human capacity building through South-North, South-South and North-South academic exchange, (4) capacity strengthening of universities in the South, and (5) knowledge transfer to the project target groups, and knowledge brokerage and advisory services for development organisations and the German government. The FSC seeks to become the leading “think tank” for food security related issues.

Further Contributions

Ingar Brueggemann is Vice-Chairman of the Deutsche Stiftung Weltbevölkerung (German Foundation for World Population). The foundation’s main goal is to help people free themselves from poverty and to protect themselves from unwanted pregnancies and HIV/AIDS. For this purpose the foundation supports family planning and sexual and reproductive health projects in Africa and Asia. Ms. Brueggemann herself can look back on a long professional career at the World Health Organization (WHO). For several years she was



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Director of External Coordination for Health and Social Development. From 1992 she was in charge of the Development Policy Forum of the German Foundation for International Development in Berlin, and from 1995 to 2002 she was the Director-General of the International Planned Parenthood Federation (IPPF) in London.

From the very beginning Ingar Brueggemann was stressing the point that food security needs to be linked to people. When comparing the distribution of development funds, “family planning” is not – and has never been – high on the list of agenda for complex reasons. Brueggemann was criticising that most discussions on environment, hunger, food availability, water, climate change take place without making the absolutely necessary link to “people” and the impact of the number of people on all of these subjects. She argues that in the context of food security, it is obvious that it can not be related to agriculture alone or to the structures of trade. Families in developing countries grow larger and larger, while the fields which should deliver the food for them, become smaller and smaller. If we were to succeed in slowing down population growth, according to Brueggemann this would be an essential contribution to food security. For her it is highly relevant to correlate food security to population in need, although at the same time she admits that population issues are a very sensitive matter.

Ingar Brueggemann considers ignorance as a major crime of society, since better education is such an easy preventive matter. For her the education of young girls and women is the most crucial precondition for development. This is not limited to knowing how to read and write, but to learn to understand change. It is well known that basic education leads to acceptance of change in daily life and opens the door to a change in lifestyle, for example, to take up family planning measures, provide health care for children and break away from unhealthy traditions. According to Brueggemann every year, about 14 million young women between 15 and 19 years of age give birth to a child, and usually they have to leave school, often are rejected by their parents and further professional training comes to a hold. To end in prostitution is often the only way left for a young girl to feed her first baby, and a second is soon to come.

Prof. Albrecht Melchinger, is professor of Applied Genetics and Plant Breeding at the Universität Hohenheim. Being asked to what extent genetic engineering may help to improve food security, Melchinger underlined the potential of conventional plant breeding in combination with modern genomic tools for exploiting the huge, largely untapped genetic potential of genetic resources. He reminded the major increases in crop productivity achieved during the “Green Revolution” and argued that conventional plant breeding has been undervalued during the past decades with declining financial support for CGIAR centers as well as NARS with a mandate for plant breeding.

He emphasised that yield has once again become a major breeding objective. In view of the uncurbed population growth and the increasing scarcity of arable land, agricultural productivity must be increased. Moreover, the situation is compounded by the fact that plants are exposed to climate change and the increasing competition between food and energy production from agricultural crops. The increasing demand can only be met by a greater yield per unit of area. Melchinger argued that in many crops relevant for world food supply this can be achieved rather rapidly by adopting hybrid breeding. Hybrid plant breeding is the specific use of heterosis in agriculture. In scientific terms, heterosis describes the possibility of obtaining genetically superior cultivars by crossing genetically distant parents. This



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superiority can be enormous. As far as maize is concerned, the hybrids are superior to their parents in that they produce 100% higher yields than those produced by the parent plants.

According to Melchinger, the exploitation of the heterosis effect (e.g. in maize and rice) through the development of hybrid cultivars is one of the landmark achievements in plant breeding, contributing to promising results in crop yields. Conventional breeding procedures have merely led to an annual increase in yield of 1.5 per cent, whereas introduction of hybrids in rice lead to a 30 per cent increase in yield, which means that successful hybrid plant breeding corresponds to 20 years of breeding success.

Michael Windfuhr is Human Rights Director at Brot für die Welt (Bread for the World), the protestant development action in Germany. This programme, set up by the protestant church in Germany in 1959, works jointly with local churches and partner organisations in Africa, Asia, Latin America and Eastern Europe on over 1,000 projects, all of which are aimed at helping people to help themselves. The word “Bread” does not only refer to food. “Bread for the World” fights to give people everything they need to live their lives in dignity – independent of origin and social status.

Michael Windfuhr urged to not reduce the problem of hunger to a question of production and yields. He demanded to invest in the people and the people's ability to feed themselves. He emphasised that the right to food is an inherent human right of every woman, man, girl and boy, wherever they live on this planet. The Right to Food approach relies on peoples' access to productive resources such as land, water and genetic resources. For the long term food security environmentally-sustainable production methods are essential in order to feed a growing world population. Windfuhr underlined that most farmers in the developing world are hungry, although they are growing food. Their agricultural produce is not fetching enough money at the market to allow them to buy other foods for a balanced diet.

According to Windfuhr the situation is caused by a dramatic deinvestment in rural areas. While for example African countries cut their budgets for rural development between 1985 and 2005 by half, the same happened with development aid. The share of bi- and multilateral aid going into the rural development dropped from close to 20 percent to less than 4 percent in 2006. Parallel many developing countries were advised to cut done funding for rural institutions. Many institutions from marketing boards to veterinary services were either closed down or privatised during the 80ies and 90ies. This all results in a situation where hunger is particular high in rural areas (around 75 percent of all hungry and malnourished live there) and among rural producers or rural workers. Their situation is often aggravated due to their lack of secure access to land and other productive resources, a problem particular relevant for women farmers, who produce close to 70 percent of staple food in Africa.

For Windfuhr access to land does not automatically mean ownership. A secure tenant regulation can also offer access to an income in dignity. On the other hand, access to land does not automatically guarantee that people can get a sufficient food supply or income to have their right to adequate food guaranteed. Access to land must therefore be accompanied with sufficient access to other input factors, like access to water, credit, transport, markets and a functioning support package, etc.



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The right to food is important because political decisions are causing the persistence of hunger and malnourishment. Just a “business as usual approach” will not reduce hunger in a foreseeable future. It is necessary to hold government actors accountable for implementing the right to adequate food. He further emphasised that discussing the right to adequate food involves not only talking about calories or proteins intake, it also means talking about how a person can have real access to food in dignity - either by having an income allowing the purchase of adequate food or by having access to resources, specifically productive land.

Windfuhr summarised that people are not hungry or chronically malnourished because of too little food being produced, although this happens in situations of acute famine, linked to draughts or civil wars, but most people are hungry because they either do not produce enough food or agricultural produce for themselves or they do not have enough income to buy it. Increasing the yields of big farms and plantations may increase the surplus, but it will not necessarily decrease the number of hungry people.

When asked why many organisations seem “to love” the smallholder farmer, Michael Windfuhr was clarifying that it is not an ideological support of small is beautiful, but he was emphasising that it is important to stabilise the income of those actually hungry and malnourished. Due to the fact that to a huge extent the hungry are small holder farmers, they need to be supported. Additionally he noted the important role of the smallholder farmers in staple food production worldwide. When small-scale farmers have access to necessary resources and marketing facilities their yields per hectare are often much higher than the yields in mechanised, modern agriculture. Increasing the concentration in the land tenure structures in rural areas will create more landless poor people, a process which will produce more hunger.

Being asked about the activities of big international players in the food and agricultural market, he mentioned the increasing problem of land grabbing with the example of Madagascar (where a 1.3 million ha land deal between the South Korean company Daewoo Logistics and the Government of Madagascar had recently been proposed, but not gone through.).

Prof. Manfred Zeller is Professor for Rural Development Theory and Policy, Department of Agricultural Economics and Social Sciences in the Tropics and Subtropics and Director of the newly founded Food Security Center (FSC) in Hohenheim. He is Member of the Scientific Advisory Council of the Ministry for Development and Economic Cooperation (BMZ) and elected Member to the Council of the International Association of Agricultural Economists (IAAE).

Zeller also emphasised that hunger and malnutrition problem in the world has been – for the past 50 years - not so much a problem of having not enough food but rather a problem of making this food accessible for those who need it most, either enabling them to grow more food themselves or enabling them to buy the food on the market through other income sources. For him safety net policies are important in the fight against poverty and hunger, but cannot be long-term strategies, both on equity and ethical grounds. What Zeller referred to as the root cause of the problem is the lack of socio-economic access to food. Agricultural supply has been outpacing demand over the past five decades which will be certainly changing, According to Zeller, we not only have not solved the distributional issues, but we



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are facing also increasing demands for more production, while at the same time we face new and increasing constraints limiting production.

Zeller was making a pledge that we are not turning back to the 1950s and 1960s, and focusing our research only on growth and production issues, but that we follow a two-pronged and more targeted strategy. Two-pronged means that production and especially environmental issues should be on the rise, but that we continue to focus on the social and institutional issues, both in research and development policy. Public research institutions, such as the Universität Hohenheim, have fortunately the freedom to focus on issues that from a societal perspective are absolutely relevant but may not be lucrative enough for the private sector. With a “targeted strategy” he means one where agricultural research and related institutional innovations focus on the smallholder agriculture on which most of the poor depend on. Enabling poor smallholders to acquire adapted seeds, fertiliser, irrigation and energy systems suitable for their conditions is not only making a great contribution to the production problem but at the same time to the distributional problem.

With respect to land, Zeller argued that a great part of smallholders suffer not only from small farm sizes, but also from the lack of tenure security. This means that they cannot be sure that they have access to the gains from any of their long-term investment in soil fertility and agrobiodiversity as research in the uplands of Northern Vietnam shows that increased tenure insecurity leads farmers to invest less in agroforestry and in other means of protecting the soil, such as terracing.

Zeller was furthermore arguing that the rate of return of agricultural research and investing in rural development especially focusing on smallholders are very high and that agricultural research is one of the most efficient means combating poverty and food insecurity in the world.

Friedlinde Gurr-Hirsch, State Secretary in the Ministry of Food and Rural Area thanked the key note speakers and the panel participants for their contributions and acknowledged the leading role of the Universität Hohenheim in the field of rural development. She underlined that the Universität Hohenheim has a proven record of excellence in development-oriented research and teaching and that the agricultural sciences in the tropics and subtropics are nationally the leading institution and has achieved an outstanding reputation at international level. Gurr-Hirsch pronounced the global responsibility to combat hunger and to mitigate the negative effects of climate change.

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