



# Global Forum for Food and Agriculture 2015

**Summary of Results** 





### Foreword



#### Dear Reader,

The 7th Global Forum for Food and Agriculture (GFFA), which was held during this year's International Green Week, once again more than lived up to its role as the leading international meeting point for policy makers, industry, academia and civil society to discuss agricultural issues. The GFFA's title "The growing demand for food, raw materials and energy: opportunities for agriculture, challenges for food security?" attracted 1,400 people to participate in an international debate on using the bioeconomy while ensuring the primacy of food security. The GFFA working meetings and panel discussions identified the opportunities that the bioeconomy offers agriculture, and in particular smallholders. The growing demand for agricultural raw materials for the non-food sector is both an opportunity and a challenge. It opens up new market outlets which provide agricultural enterprises with income and new jobs. This plays an important part in fighting poverty and in diversifying and building resilience in agriculture. However, the focus must still be on food security: this is and remains the overarching task of agriculture.

The results formed the basis for the negotiations in the 7th Berlin Agriculture Ministers' Summit, which brought together 62 agriculture ministers from across the globe and representatives of the FAO, the World Bank and the EU Commission. Based on three challenges, namely to: "use the opportunities arising from the bioeconomy, ensure sustainability of production and use, and ensure the primacy of food", we agreed unanimously upon a number of specific measures and recorded these in the communiqué we adopted. For instance, we advocate using examples of best practice to promote an international exchange of experiences on the successful establishment of bio-based value chains while at the same time ensuring the primacy of food security. We also advocate transferring know-how and technology to make the production of renewable resources sustainable across the globe. We are aware that each region must develop its own bioeconomic environments and concepts adapted to the specific conditions that prevail. We will feed the results of the communiqué into the further discussions in the FAO and the G20.

Many participants contributed to the success of the GFFA by showing exceptional commitment. These included the high-level representatives of the international organisations, the panel members, the organisers of the expert panels and the exhibitors at the Cooperation Market. I would like to express my heartfelt thanks to all of them. The results of this year's GFFA speak for themselves - as you can see in this brochure.

I hope you find it an interesting and stimulating read and I would be delighted to welcome you to the GFFA in 2016.

Your

Christian Schmidt, Member of the German Bundestag Federal Minister of Food and Agriculture

## The Global Forum for Food and Agriculture (GFFA)



View of the Business Lounge



Berlin Agriculture Ministers' Summit

The GFFA is an international conference that focuses on central issues regarding the future of the global agrifood industry. It was held in Berlin during the International Green Week (IGW) and this year took place for the seventh time. The forum gives representatives from the worlds of politics, business, science and civil society an opportunity to share ideas and agree on political reference points on a selected topic of current agricultural policy within the context of food security. The GFFA is organised by the Federal Ministry of Food and Agriculture (BMEL) in cooperation with GFFA Berlin e.V., the Senate of Berlin and Messe Berlin GmbH.

Under the title: "The growing demand for food, raw materials and energy: Opportunities for agriculture, challenges for food security?" the GFFA brought together 1,400 people in Berlin this year, including 62 agriculture ministers from across the globe. Several international organisations and the EU Commission also sent high-level representatives to this event. Representatives from science, industry, civil society and politics jointly discussed the opportunities and challenges arising for agriculture with regard to the issue of bioeconomy. This year's GFFA thus once again offered one of the most important international platforms for dialogue in the field of agriculture, and as the biggest agriculture ministers' meeting it also remains the main driver of the international agricultural agenda.

## Kick-off event: Bioeconomy: an opportunity for agriculture and poverty eradication worldwide

"The growing demand for food, raw materials and energy: opportunities for agriculture, challenges for food security?" Under this theme, approximately 1,400 representatives from politics, industry, science and civil society jointly discussed possible approaches to taking advantage of the opportunities provided by a sustainable bioeconomy in agriculture while at the same time consolidating the primacy of food security.

In 2015, the GFFA was once again officially opened with a kick-off event by Parliamentary State Secretary to the Federal Minister of Food and Agriculture, *Peter Bleser*. The kick-off event gave a general introduction to the complex theme and was successful in setting the necessary scene for all GFFA expert meetings including the 7th Berlin Agriculture Ministers' Summit.

In his welcome address, *Peter Bleser* stated that the GFFA had become something of an international institution and a driving force for questions in the field of agriculture and food policies. He linked this year's theme to that of last year's GFFA by explaining that the most impor-

tant bioeconomy element was food security. He emphasized that the sustainable production of biomass was the essence of bioeconomy. He stated that the bio-based economy was not conceivable without the products of the farming and forestry sector. He went on to say that thanks to the manifold possible uses of agricultural and forest products there were many development opportunities, in particular for rural areas, although care was to be taken to ensure the primacy of food security. However, he also said that there was no generally applicable formula for the sustainable and resource-efficient production and processing of agricultural raw materials and that instead what was needed were tailor-made solutions for each individual region. On that note, Mr. Bleser appealed to the GFFA's international guests to actively contribute to the discussion.

The State Secretary at the Berlin Senate Department for Justice and Consumer Protection, *Sabine Toepfer-Kataw*, illustrated the situation from the perspective of the City-State of Berlin, where there is often little contact with farming. She said that as in other major cities, the discussions on bioeconomy were rather based on the premise of nature conservation.



Peter Bleser, Parliamentary State Secretary to the Federal Minister of Food and Agriculture



Sabine Toepfer-Kataw, State Secretary at the Senate Department for Justice and Consumer Protection



The audience

The following speaker was Tabaré Aguerre, Minister of Agriculture from Uruguay, who described the situation in his home country. He said that agricultural exports from Uruguay had surged considerably, and that his country was thus making a significant contribution to global food security. He went on to say that at the same time the production of biofuels had increased, which had had a positive effect on economic growth and hence on securing income. Uruguay was looking for more ways to strengthen the competitiveness of the farming sector and to sustainably produce highest-quality food that consumers could have every trust in. According to Mr. Aguerre, safeguarding soils and water and preserving biodiversity are the key issues in this matter. He said that use of these resources had to be intensive yet at the same time sustainable. In his view, climate change adaptation measures remained necessary.

The scientific adviser to the Argentine government, *Eduardo Trigo*, stated that agriculture in South America was achieving higher rates of productivity growth than other regions in the world, particularly in Argentina, Brazil, Uruguay and Paraguay. He stated that agricultural policy did not focus enough on the bio-based economy, and that international rules were particularly necessary to ensure that natural resources were used in an efficient and sustainable manner. He went on to say that, in view of the participants and audience, the GFFA was a good platform to start this urgently required discussion.

Manuel Lainez, Director-General of the Spanish National Institute of Agricultural Research, Agriculture and Food Technology, illustrated the importance of agriculture for his country and the particularly adverse effects of climate change, especially increasing water scarcity. He pointed out that a lot of agricultural waste could be used for other production processes. He said that this was the central approach of the current Spanish farm policy. In this context he underlined the fact that plant products should not just be considered as food and energy sources, but that the possible applications such as bioplastics or pharmaceutical products should not be overlooked.

Six experts from the bioeconomy sector then gave statements, supplementing the contributions by the panellists. Representatives from science, politics and industry, and also from farmers' and environmental organisations, all shared their views on the theme.

The ensuing discussion between experts and participants from the audience, which was facilitated by Prof. Joachim von Braun, Chair of the German Bioeconomy Council, focussed on one pivotal point for the international debate on bioeconomy within GFFA 2015: It soon became clear that solutions would need to be regional in character. Everyone agreed that each country needed to develop its own, regional, tailor-made solutions in conjunction with the bioeconomy and that bioeconomy itself constituted a far-reaching social transformation. They said that politics, society, business and science would also need to break new ground to be able to seize the opportunities provided by the bioeconomy. They underlined that international cooperation would be helpful to this end, not merely to facilitate the exchange of information but also to aim towards establishing international schemes.

It became clear that the GFFA was a good setting for the wide-ranging questions brought up during the kick-off event and the widely divergent views on bioeconomy at international level. With its approximately 1,400 representatives from politics, industry, science and civil society, the Global Forum for Food and Agriculture this year once again provided the platform for the development of potential solutions.

## Expert Panel Discussions and Working Meeting

The second day of the Global Forum for Food and Agriculture (GFFA) 2015 was dominated by in-depth discussions in technical and working meetings.

Traditionally, the second day of the GFFA is dedicated to detailed analysis and expert discussions on the topical issue. The primary goal of the meetings was to take a look at opportunities and challenges presented by the bioeconomy for agriculture from different regional perspectives and to share experiences from different countries and regions.

The **expert panel discussions** provided an informative platform to illustrate different perspectives and exchange views with an interested expert audience. Organisers from politics, industry, science, civil society and international organisations had extended invitations to 10

events. The issues presented and discussed ranged from the practical implementation of the primacy of food security, the role of satellite data for food security and issues of sustainability and participation to an in-depth look at certain regions, such as India, Brazil, Eastern Europe and the European and Central Asian regions.

The events were largely very well attended and were able to highlight the positive effects that the bioeconomy already has on agriculture and on the economic development of rural areas in the different regions of the world and the potential that a further expansion of the bioeconomy holds, while showing that it was vital to involve the people on the ground and include them in this ongoing process. The prevailing thought was that the primacy of food security should not be left to the market alone; it was instead viewed as a task for policy makers, particularly to ensure that this principle was established at international level.



Expert panel discussion

from left: Dr. Michael Brüntrup, Clemens Neumann, Dr. Fred Dzanku, Michaele Hustedt, Dr. Wolfgang Jamann and Jan Lerch



Discussions before the expert panel meetings

The expert panels were not the only place for the expert audience to share their views and ideas: in the Cube Café of the newly opened CityCube, the **Business Lounge** served as a meeting point to engage in dialogue, establish new contacts and continue discussions on insights acquired at the previous events. Many visitors were happy to take advantage of this facility and once again turned the GFFA into a forum that closely combined formal discussions with informal exchange.



Audience at the FAO Working Meeting

The expert panel discussions were followed by two working meetings, organised this year by the FAO and the World Bank. Opportunities and challenges arising for agriculture with regard to the issue of bioeconomy were discussed in detail, with the FAO working meeting focussing more on the challenges and the World Bank working meeting focussing first and foremost on opportunities. Both working meetings clearly demonstrated that it was particularly important to improve sustainability in agricultural production. The FAO working meeting also took into account the sustainable management of soils. Growth in productivity is certainly needed to improve sustainability; however, harvest losses and harvest waste must also be reduced significantly - this aspect was repeatedly highlighted by the panellists. They said that the transfer of know-how had to be stepped up in order to minimise losses.

The results of the working meetings were presented during the 7<sup>th</sup> Berlin Agriculture Ministers' Summit by the FAO and the World Bank, and then integrated into the final communiqué.

## GFFA Working Meeting of the FAO



## Addressing Food Security Challenges under Increasing Demand for Land, Soil and Energy

#### Welcoming address:

José Graziano da Silva, FAO Director-General

#### Panel members:

**Moujahed Achouri**, Director of the FAO Land and Water Division

**Tabaré Aguerre,** Minister of Agriculture of the Eastern Republic of Uruguay

**Adrian Aebi,** Vice Director of the Swiss Federal Office for Agriculture (BLW) and Head of the International Affairs Unit

**Amadou Allahoury,** Minister of Agriculture of the Republic of the Niger and High Commissioner of the 3N Initiative

**Gerd Sonnleitner,** UN Goodwill Ambassador for the "International Year of Family Farming" and former President of the German Farmers' Association

**M. Mehdi Eker,** Minister of Agriculture of the Republic of Turkey

#### **Facilitator:**

**Prof. Dr. Joachim von Braun**, Chair of the German Bioeconomy Council.

The FAO working meeting focused on addressing food security challenges in the face of increasing demand for land, soil and energy.

With his keynote statement at the beginning of the working meeting, FAO Director-General *Graziano da Silva* set the framework for an intensive debate on the challenges of food security in the face of increasing demand for agricultural raw materials. With 2015 being the International Year of Soils 2015, he also addressed land management issues.

In his welcoming address, *Graziano da Silva* mentioned the great progress made in the field of food security but also noted that hundreds of millions of people were still suffering from hunger. He went on to say that at the same time growing problems caused by unhealthy eating were being experienced in industrialised countries, and also in developing countries and emerging economies. He stated that, in addition to this, too many food products were wasted or lost, e.g. because of a lack of storage capacity. He went on to explain that the way in which food was produced and consumed and natural resources were used played a decisive role when it came to meeting the challenges of food security.

Director-General *Graziano da Silva* declared that the agriculture of the future would have to meet the increasing demand for food, feed and non-food products. In this context, *Graziano da Silva* stated clearly that it was important that the food-or-fuel debate was turned into a food-and-fuel debate. And he explained that although food security should of course be given top priority, it should not be forgotten that the increasing demand for biofuels would generate additional income for farmers and make them more independent from the volatility of the food market.

Moujahed Achouri used his address to put Director-General da Silva's thoughts into more specific terms, formulating five key messages for the working meeting:

1st Key message: There is a huge challenge ahead in addressing needs for basic development needs in the wake of competition for natural resources.

**2**<sup>nd</sup> **Key message:** Through its new strategic framework FAO fully embraces the need to sustainably address the competition for natural resources as a crucial challenge to achieving food security.

**3rd Key message:** There is an urgent need for concerted efforts to ensure the sustainable management of land and soils in order, in turn, to ensure sustainability and food security.

**4**<sup>th</sup> **Key message:** The agriculture of the future will need to meet increasing demand for food, feed and non-food products.

**5**<sup>th</sup> **Key message:** Family farmers across the world are central to efforts towards sustainable agriculture and food and nutrition security.

Uruguay's Minister of Agriculture, Tabaré Aguerre, specifically took up the third key message and underlined the sustainability of production with regard to soil. He said that without soil there would be no agriculture, and that a carefully thought-out soil control policy was therefore required. He reported on the experiences made in Uruguay, where the area of land under cultivation and the intensity of land use have both risen. He explained that it had been quite simple to prevent erosion damage by changing from traditional ploughing to direct sowing. However, he went on to say that technical progress alone would not be able to solve all problems, and that policy-makers were also called upon to act. He said that a long-adopted land conservation Act had finally been implemented in Uruguay in 2012. He explained that land owners were now responsible for a "soil management plan" while soil erosion was at the same time monitored with the help of satellite images. He said this meant that, in contrast to the past, Uruguay had now adopted policies to control soil erosion that took a preventative approach.

Adrian Aebi stated three basic requirements in his address:

- → The farming sector needed more technology
- → The farming sector needed more capital inflows
- → Food production took priority.

He underlined the fact that the agriculture of the future would have to reduce the use of chemicals, water and energy. He also brought up the issue of food loss and food waste and called for consumers to also play their part by rethinking what they eat and, in particular, reducing their meat consumption.

Amadou Allhoury's address focused on climate change and its negative impact on agricultural production. He explained that the situation in his home country Niger was particularly dramatic, especially for the poor. He said that a holistic, multi-sectoral approach was required and that international co-operation had to be strengthened. He went on to say that participative elements were of particular importance in this regard and that small producers, in particular, had to be included.



from left. Adrian Aebi, Tabaré Aguerre, Amadou Allahoury, M. Mehdi Eker, Gerd Sonnleitner, Moujahed Achouri

Gerd Sonnleitner called for a focus to be placed on land use as well as soil conservation. He said that the farming sector, and family farms in particular, played a major role in this respect. He emphasised the importance of legal certainty and access to water, education and infrastructure, and of politically independent agricultural self-help organisations.

Turkey's Minister of Agriculture, *Mehdi Eker*, pointed to the security threats posed by the fact that 800 million people were still suffering from hunger. Like the previous speakers, he stressed the importance of not wasting food. He said that the food produced today could feed all people suffering from hunger around the world if no food was wasted or lost due to poor or non-existant storage capacities. He also pointed to the problems caused by increased land grabbing by some industrial states.

The discussion therefore offered a multi-faceted debate on the challenges of food security, particularly with regard to soil conservation and food loss.



## GFFA Working Meeting of the World Bank



## Resilient Supply Chains in Food and Agriculture: Growing the Bioeconomy from the Bottom Up

**Opening:** 

Gene Moses (IFC)

Keynote speech:

Michael Obersteiner (IISAS)

**Facilitator:** 

Jürgen Vögele (World Bank)

Panel members:

Aidan Cotter (Irland)

Agnes Kalibata (Rwanda)

Berry Marttin (Rabobank)

Anne Roulin (Nestle)

In his opening address, *Gene Moses* pointed out that the world would need to produce at least 50 % more food by 2050 to feed 9 billion people. He said that the challenges of meeting this rapid increase in demand for food and raw materials would place enormous pressure on supply chains. He continued by saying that this raised the question as to how the close cooperation of all parties involved could ensure the supply of food.

Michael Obersteiner explained in his keynote speech that, in his view, four major "drivers" would influence the supply chains in the future: the growing world population, urbanisation, the number of people living in democratic states and changing diets. He went on to say that climate change would make food production more difficult, although with great variations between the individual countries and regions. He explained that early adaptation to climate change could significantly reduce adaptation costs, whereas the wrong adaptation measures might increase costs a greater extent than if no adaptation measures were taken.



Jürgen Vögele

Jürgen Vögele underlined that it was beyond doubt that more food would have to be produced in the future but that the farming sector was not sustainable enough when looked at from a global perspective. He said that, at present, the farming sector accounted for approx. 25 % of all greenhouse gas emissions, making it the world's largest single emitter of such gases.

Aidan Cotter presented an initiative launched a few years ago and aimed at making the entire Irish supply chain for beef and milk more sustainable with the help of verifiable criteria. He said that every holding – ranging from agricultural holdings to processing and marketing establishments – was audited every 18 months. He stated that, in the World Bank's view, this was one of the most ambitious initiatives to make agriculture more sustainable that focused on the entire supply chain.

As an example for sustainable production growth in the agri-food sector, the former Minister of Agriculture of Rwanda, *Agnes Kalibata*, spoke about the development

her country had made over the last few years. She said that the densely populated country, characterised by steep hills and high precipitation, had in the past not been able to provide its population with adequate food. She went on to say that a joint initiative by all stakeholders had in recent years been able to significantly expand sustainable production methods, protecting the soil from erosion and allowing the cultivation of adapted plant varieties. She stated that production and incomes from agriculture had been significantly increased by strengthening small farms through extension services and the establishment of cooperatives.

Jürgen Vögele emphasised that this showed that in spite of difficult conditions, great progress could be made within a short time with appropriate political leadership and the involvement of all stakeholders.

Berry Marttin of Rabobank explained that although agriculture was confronted with many risks, the number of loan defaults was very low in this sector, and particularly low in the case of family farms. He stated that loan defaults primarily occurred if the cash flow was too low or if no reserves had been built up, while natural conditions such as climate or soil quality played only a minor role. He declared that good education, adequate financial resources, a good political and legal environment and a sustainable production chain were far more important. He said that in Rwanda, for example, cooperatives had been founded which had significantly improved the storability and quality of rice through the use of drying systems.

In conclusion, *Jürgen Vögele* underlined that the most important thing was to reduce the risks along the entire production chain and not only in individual parts.

Anne Roulin of the world's largest food corporation Nestlé explained how the company was involving producers in order to seek greater economic success for



Berry Marttin and Agnes Kalibata

all stakeholders. She declared that sustainability auditing and improved tracking and tracing of products were essential in this context. She stated that, at present, more than 80 % of the palm oil could be traced back to the producer, and it was intended to increase this share to 95 % in the years to come. She went on to say that it was also planned to strengthen farmers' direct marketing channels. Using three examples, she explained how an extension initiative in Pakistan, improved storage of cereals in Nigeria and a project in Vietnam had been to the economic benefit of producers and the environment alike.

The final discussion, which also involved the public, underlined that adequate storage was an essential prerequisite to curb volatility on agricultural markets and that a functioning banking sector, providing small businesses with access to credit e.g. through the foundation of cooperatives, and the involvement of all stakeholders in the supply chain, was vital to sustainable food provision.

### Cooperation Market



Peter Bleser, Parlamentary State Secretary and Chinese Vice Minister Niu Dun talking with visitors at the Cooperation Market

During the Global Forum for Food and Agriculture (GFFA) 2015, the Cooperation Market took place for the first time in the new CityCube Berlin premises. It was attended by a total of 40 international exhibitors, including associations and companies, but also universities, institutions and non-governmental organisations involved in agriculture and international cooperation. The focus of the Cooperation Market has always been on personal exchange, i.e. networking.

In addition to the Federal Ministry of Food and Agriculture (BMEL), this year's exhibitors also included the FAO with its own information booth. The Cooperation Mar-

ket included a presentation of specific projects as well as of the institutions and their activities.

BMEL Parliamentary State Secretary *Peter Bleser* underlined at the opening ceremony of the Cooperation Market: "Sustainable bioeconomy is an opportunity that can be of benefit to farmers and people living in rural areas." On his final tour of the exhibition hall, *Bleser* was accompanied by Chinese Vice Minister *Niu Dun*. The Cooperation Market provided numerous trade visitors with information and the opportunity to establish new contacts. They gladly accepted Mr. *Bleser's* invitation to look at the exhibitors' wide range of exciting offers.

## International GFFA Panel Discussion

A panel composed of high-level representatives from politics, industry, research and civil society, and moderated by Dunja Hayali, discussed in detail the opportunities and challenges arising from the bioeconomy. In doing so, the panel took up and developed the outcomes of the preceding expert meetings.

On Saturday morning, the high-profile international panel and the interested audience first listened to a video message from HRH *Prince Charles of Wales. Prince Charles* strongly urged the participants to seize the opportunity and become active **now**: he said that 2015 was a crucial year for acting together and jointly working towards the sustainable development goals. The *Prince's* appeal was clear: a courageous and strong leadership at all levels was required more than ever before, not only by political circles but also by industry, religious communities, NGOs and civil society. *Prince Charles* also pointed to the challenges posed by climate change and resource depletion which made it necessary to join forces at international level and take action now. He mentioned five key aspects:

- 1. The relationship between cities and rural areas must be reconsidered.
- 2. The scandalous waste of food prior to and after harvesting must be controlled.
- 3. The extent and scope of fossil fuel subsidies must be reconsidered.
- 4. The current biofuel and biomass policy requires critical evaluation.
- 5. It is smallholders and family farms that make a vital contribution to food security.

In his welcoming address, *Federal Minister Schmidt* took up *Prince Charles*' request to join forces to find a way towards the sustainable development of the agricultural sector. He underlined that food security was and remained the overarching task of agriculture. But he went on to say that food production on the one hand and production for material and energy use on the other

hand were not mutually exclusive. Instead, he argued that agriculture should become more efficient and sustainable. He said that the bioeconomy provided an opportunity to be able to meet the increased demands placed on agriculture as it provided new sales markets for agricultural holdings and created income in rural areas. But *Minister Schmidt* also made it clear that: "There is no single, ready-made solution for all regions of the world. Instead, intelligent, site-adapted and sustainable concepts are required". In this context, he emphasised that the decisions taken must be more binding. Federal Minister Schmidt summarised all this in a clear message: "We need to move away from politics in the subjunctive and move towards politics in the imperative".

Asked by *Dunja Hayali* about Germany's role, Schmidt pointed out that Germany would like to continue discussions on the principles developed at the GFFA with its European and international partners and implement them at national level.

The term "bioeconomy" was defined at the beginning of the panel discussion: Prof. von Braun, Chair of the German Bioeconomy Council, defined the term "bioeconomy" as the production and use of biological resources, the use of biological processes and biological knowledge ("to copy what nature shows us") in order to produce goods and services. He stated that this required a new relationship between humans and nature. He went on to say that industry should switch to biobased production. He said that, at present, 15 % of all goods were biobased, but that by the middle of the century, this percentage should increase to 50 %. He added that this applied not only to energy production but, for instance, also to the construction, pharmaceutical and automotive industries. And he explained that it was not only a matter of reducing the consumption of fossil energy sources; it was also the case that consumers were increasingly asking for bio-based products that had been produced in a more sustainable and resource-conserving way.

Finland's Minister of Agriculture *Petteri Orpo* then gave an insight into the Finnish bioeconomy strategy. He said that more than 60 % of the Finnish industry could now be considered bio-based. He also underlined that different countries required different strategies when it came to supporting the bioeconomy.



Federal Minister Christian Schmidt and Dunja Hayali

R. Vasu Vasuthewan, consultant in the South-East Asian bioeconomy sector, reported on his experiences in Malaysia where the government had launched a programme to strengthen the bioeconomy as part of the national development plan. He said that this policy measure had led to the private sector also contributing its share to the development of a bio-based economy. He explained that there were opportunities for rural areas, e.g. if smallholders cultivated new products such as stevia.

Following these reports, *Ms. Hayali* examined the actual opportunities for the local population, and for smallholders in particular. The main coordinator of the international "La Via Campesina" movement, *Elizabeth Mpofu*, viewed the benefits to smallholders with a very critical eye. She said that such developments must not be dictated "from above" and called for farmers to be included when it came to discussing opportunities. She concluded that, at present, smallholders were not sufficiently involved and did not benefit as much as necessary from the opportunities arising from the bioeconomy.

Cornelia Füllkrug-Weitzel, priest and President of "Bread for the World", supported this view. Although she did not deny that smallholders had an opportunity to generate additional income, she argued that for smallholders to be able to take advantage of this opportunity, they needed to be provided with adequate information and access to the relevant opportunities. She went on to say that it was still not clear whether smallholders really were the right target group, as smallholders used their land to feed themselves. And she asked whether smallholders actually benefited from making their land available for bioeconomic production for the global market. She said it was rather the case that the smallholders' land was used for agricultural mass production without any economic benefit to the smallholders themselves. She stated that this made the situation there even worse as this meant that even more people in rural areas suffered from hunger. Ms. Füllkrug-Weitzel made it very clear that smallholders did not benefit from the bioeconomy and that there was instead a risk that the bioeconomy would only feed the industrial countries, or indeed their bins due to the overnutrition which already existed in these countries.

Dr. Evelyn Nguleka, President of the World Farmers Organisation, first explained that population growth and diminishing fossil resources were facts we had to deal with. She argued that, in view of this, smallholders could definitely also benefit from the production of biofuels, as to a large extent agricultural products were still wasted. Dr. Nguleka also said: "We cannot simply say that the introduction of biofuels will increase poverty". She referred to the situation in her home country of Zambia, where a large percentage of the maize harvest was lost. She said



from left José Graziano da Silva, Petteri Orpo, Elizabeth Mpofu, Evelyn Nguleka, Christian Schmidt, Cornelia Füllkrug-Weitzel, Joachim von Braun, R. Vasu Vasuthewan, Deon Nel, Dunja Hayali

that with the necessary innovations, this maize could be used for energy production and make the farmers less dependent on the food markets.

When *Ms. Hayali* picked up on the reproach that bioeconomy was dictated "from above", *Prof. von Braun* replied that bio-based products were increasingly popular with consumers so one could also say that it was a "bottom-up" rather than a "top-down" process. He further argued that it was important that civil society kept up the pressure, as policy-makers, industry and science would react to consumer demand. And he concluded that the fact that many countries, including developing countries, had already drafted bioeconomy strategies was also a result of this development. With regard to the problem of "land grabbing" in Africa, *Prof. von Braun* declared that smallholders must not be deprived of their land rights, but that this was an issue of legal policy rather than one related directly to the bioeconomy.

A controversial debate about how to deal with "land grabbing" followed. *Ms. Füllkrug-Weitzel* asked whether the demand for legal certainty was about legal certainty for the smallholders or about legal certainty for the large producers. *Mr. Vasu Vasuthewan* underlined that the extent of "land grabbing" was above all dependent on

the strength of the relevant government. He also made it clear that we shouldn't rely exclusively on industry and instead should mix "bottom-up" and "top-down" approaches. He went on to say that what was frequently needed was for policy-makers to establish an implementation plan first of all and to then leave it up to demand to regulate further progress.

On the issue of food security, *Dr. Deon Nel*, head of the WWF regional office for nature conservation in Africa, added that a soundly planned bioeconomy would be able to ensure food security. *Prof. von Braun* supported this argument as he said that the bioeconomy would create jobs where they were most needed. He said that, furthermore, the biomass required for material and energy production would not be withdrawn from food production.

Ms. Füllkrug-Weitzel also pointed out that there had, for a long time, been many farmers around the world who also grew renewable resources. However, she went on to say that they had not received any support from international agricultural policy, and the funds had instead been channelled into the agro-industry. She asked why the available funds were not being used to support efforts undertaken by smallholders towards bio-based production. She continued by saying that there was reason to



José Graziano da Silva and Dunja Hayali

fear that the only beneficiaries of bioeconomy would be in the industrialised countries while the developing countries would be mere suppliers of biomass. *Prof. von Braun* disagreed with this view: the developing countries themselves would have an interest in marketing their biomass. He went on to say that the situation would change in the coming decades and create opportunities for biomass to be used efficiently instead of wasted. He finished by saying that the goal should be to deploy the new technologies jointly with a view to having a harmonious bioeconomy.

*Dr. Nguleka* stated that these discussions would go on forever if agriculture continued to not be regarded as an economic activity. She went on to say that each farmer was ultimately a businessman and acted according to the rules of economics. She said that all farmers, including Africa's smallholders, would therefore be at pains to operate efficiently and profitably because agriculture was business and not merely something to do to pass the time.

José Graziano da Silva, Secretary-General of the FAO, picked up once again on the opportunities offered by the bioeconomy, taking Zambia as an example. He said that despite the overproduction of maize in this country, many people there suffered from malnutrition. He continued by explaining that if this maize were used in other sectors of the bioeconomy, this would provide a real opportunity for farmers, enabling them to earn money in order to buy higher quality food. He said

that the problem of global hunger was not be so much the foodstuffs themselves, but the access to foodstuffs. *Graziano* pointed out that we should stop talking about a "food-or-fuel debate". He said that the ongoing bioeconomy debate at international level clearly showed that we needed the courage to conduct a "food-and-fuel debate".

Finally, the panel members engaged in a lively debate on the need to have statutory rules in order to promote the bioeconomy. Both *Ms. Füllkrug-Weitzel* and *Dr. Nguleka* cited Africa as an example where a host of statutory rules were in place, none of which were implemented. The panel members agreed that the enforcement of rules was of particular importance. *Mr. Vasu Vasuthewan* added that the smallholders also needed to organise themselves. *Petteri Orpo* said that the FAO played an important role in respect of the enforcement of rules.

In conclusion, it can be said that the lively debate shed light on key problems associated with the bioeconomy from different angles, giving all stakeholders an opportunity which they used to graphically describe their views and positions on both the opportunities and risks involved in the bioeconomy.



Federal Minister Christian Schmidt

### Berlin Agriculture Ministers' Summit 2015

Agriculture ministers from 62 states adopt measures to take advantage of the potential of the bioeconomy for agriculture and to safeguard the primacy of food security.

At the 7<sup>th</sup> Berlin Agriculture Ministers' Summit, ministers from 62 states reaffirmed their commitment to specific goals: they wanted agriculture to take full advantage of the opportunities to supply bio-based and sustainable value chains. At the same time they emphasized the particular responsibility of the agricultural sector as a supplier of accessible and adequate food for a growing world population. They recognised that they shared the responsibility of establishing policy frameworks for agriculture that enabled the growing demand for food and sustainable raw materials to be satisfied without endangering food security.

At the opening of the world's largest Agriculture Ministers' Summit, Federal Minister of Agriculture *Christian Schmidt* emphasized that there was a joint commitment to take advantage of the potential of the bioeconomy for agriculture, but that this required a targeted expansion of agricultural production which could ensure the sustainability of this production. He added that what was required were smart, site-adapted and sustainable

View of the Weltsaal at the Federal Foreign Office

concepts which people on the ground could work with. The Minister clarified that "priority always goes to food supplies", showing his unequivocal support for the human right to food.

Afterwards, the high-level representatives from the FAO and the World Bank presented the results of their working meetings. FAO Secretary General *José Graziano da Silva* praised the quality of the thematic debates during the GFFA. At the same time he stressed the FAO's readiness to further integrate the issue of bioeconomy into international debates in a responsible manner.

Jürgen Vögele, Senior Director at the World Bank, gave a summary report of the World Bank's working meeting. He hereby underlined aspects of the integrity and flexibility that would be necessary along the entire production chain, and emphasized the necessity of having a functioning banking sector. He added that the banks' special expertise should consist in including all stakeholders in the supply chain, including farmers in developing and emerging countries, and in also not refusing loans to small farms.

EU Agriculture Commissioner *Phil Hogan* then highlighted the economic potential of the agricultural sector in his welcoming address. He also noted that some of his political colleagues still underestimated this potential. He particularly emphasized the role of agriculture in developing countries. He also spoke about the issue of agricultural investment. He said that the private sector should play a role in promoting the development of agriculture as well as the public sector: "We need responsible investment of the agri-industry in cooperation with farmers to facilitate marketing and export activities," *Mr. Hogan* clarified.

In the ensuing negotiations the participating ministers of agriculture engaged in a lively discussion on the key elements of a sustainable development of the bioeconomy. The submitted version of the communiqué was strongly supported by the delegations. In the course of the debate, more recommendations for improvement were adopted, including on sustainability aspects and on accommodating and promoting education and training.



José Graziano da Silva, Christian Schmidt, M. Mehdi Eker at the presentation of the final communiqué

The ministers clearly identified the fact that the level of development in the respective regions played a decisive role in developing and implementing policies and concepts relating to a sustainable bioeconomy. In the course of the debate, adaptation and mitigation measures for climate protection were brought up, and the "Zero Hunger Challenge" initiative by UN Secretary General *Ban Ki-moon* was expressly mentioned.

In concluding the 7<sup>th</sup> Berlin Agriculture Ministers' Summit, Federal Minister *Christian Schmidt* handed over the final communiqué to the FAO Secretary General *Graziano da Silva* and the Turkish Minister of Agriculture *M. Mehdi Eker*, who intends to incorporate the communiqué's contents into the international debate under the Turkish G20 Presidency.



7<sup>th</sup> Berlin Agriculture Ministers' Summit Federal Minister Christian Schmidt in conversation with his colleagues

## GFFA communiqué 2015

The growing demand for food, raw materials and energy: opportunities for agriculture, challenges for food security

We, the Agriculture Ministers of 62 States, representing all continents, have assembled here on 17<sup>th</sup> January 2015 during the Global Forum for Food and Agriculture (GFFA) for the 7th Berlin Agriculture Ministers' Summit. Based on our shared beliefs, we are aware of the great responsibility to ensure food security and nutrition for a growing global population. This remains our most important aim as highlighted in international documents such as the Rio + 20 document "The future we want".

We are convinced that the fight against hunger and malnutrition must go hand in hand with the fight against poverty. Only resilient, diversified and sustainable agrifood systems can provide the foundation for achieving the human right to adequate food and for supplying people with adequate supplies of nutritious food or enabling them to feed themselves.

The many and diverse activities carried out during the "International Year of Family Farming" have underlined the crucial role that family farming plays for economic development, in particular in rural areas. Well-functioning and competitive agricultural, forestry and fisheries sectors, which generate decent work and income, contribute greatly to combating poverty.

However, agriculture goes beyond providing food and feed.



BERLIN AGRICULTURE MINISTERS' SUMMIT 2015

Participants at the Berlin Agriculture Ministers' Summit 2015

The limited supplies of fossil raw materials, and the impact their extraction and use have on the environment and the global climate, underline the necessity of replacing non-renewable with renewable resources. This has led to an increase in demand for agricultural raw materials for the non-food sector.

We welcome the fact that these new markets provide job and income opportunities for agricultural holdings, including smallholders, and also for upstream and downstream sectors. These markets can thus also play an important role in combating poverty, if smallholders are appropriately integrated in these markets.

The agricultural sector's potential regarding the production of food and renewable resources can help diversify the sector and strengthen its resilience to crises. We therefore see new opportunities to develop this production and believe there is great potential for promoting economic development and expanding people's livelihoods, in particular in rural areas and for vulnerable people.

A sustainable and efficient agricultural sector which feeds the people is the foundation of the bioeconomy, being one of the strategies for achieving our ultimate goal of sustainable development in its three dimensions (economic, social and environment), considering national circumstances and priorities. The idea of the bioeconomy is based on natural cycles of materials and encompasses all sectors of industry that process, use, and trade with renewable resources, for instance with plants, animals, micro-organisms, and their derivatives. The forestry, horticultural and waste sectors may, just as the agricultural sector, also supply raw materials for the bioeconomy.

We advocate that agriculture should seize the opportunities arising from bio-based and sustainable value chains but at the same time we emphasise agriculture's overarching responsibility to supply accessible and adequate food to a growing global population. We regard it as our joint task to establish policy frameworks for agriculture that enable the growing demand for food and sustainable raw materials to be satisfied without endangering food security.

The development of bioeconomy should aim to ensure the right to adequate food and to reduce poverty, in a sustainable manner, while preventing risks of compromising food security.

We agree that we must meet three challenges in order to fulfil this task:

- → Use the opportunities arising from bioeconomy
- → Ensure sustainability of production and use
- → Ensure the primacy of food

If we are able to successfully meet these challenges, we will be able to develop a sustainable bioeconomy that has many and diverse value chains and plays a crucial role in the welfare of humankind: securing adequate food supplies, addressing the challenges of climate change and sustainably managing natural resources. Agriculture could therefore strengthen its leading role in this respect through the sustainable production of raw materials.

We are well aware that, embedded within a coherent policy framework, we need to use different solutions to reach this goal, namely solutions that are adapted to regional, national and local needs, options and conditions and that take full advantage of the economic, social and ecological opportunities that bioeconomy offers.

#### Use the opportunities arising from bioeconomy

Agricultural raw materials have been used as food, feed, building materials and in crafts and trades since time immemorial. They are now also finding increased use in industry and the energy sector. Agriculture and rural areas can benefit from existing and new bioeconomy value chains. These value chains need further development and innovation. They provide access to promising markets for a large number of agricultural products and are generating new stimulus worldwide. Bioeconomy thus secures existing jobs while also creating new ones and generating additional income. This development offers agricultural holdings – including family farms – in developing countries, emerging economies and industrialised countries enormous opportunities to participate in the rapidly growing markets with a large range of different products.

The bioeconomy offers countries, particularly those with scarce fossil resources yet ample land for agriculture and forestry, an opportunity to increase the value-generation potential of their agricultural production and to boost their economic strength through the refinement to renewable products.

We, the agriculture ministers assembled at the GFFA 2015, advocate:

taking full advantage of the potential of the bioeconomy by:

promoting integrated systems that combine production of food and non-food products, in order to diversify the agricultural sector and strengthen its resilience to crises;

- establishing bioeconomy value chains and networks as drivers of the economy in rural areas and, to this end, developing and strengthening sustainable markets for bio-based products;
- → addressing socio-economic problems, including those of smallholders and young farmers;
- tapping the new, bio-based potential for innovation and value generation through dedicated research and development projects;

#### and to this end advocate:

- developing and implementing bioeconomic frameworks and concepts adapted to the conditions of the respective regions and levels of development;
- using examples of best practice to conduct an international exchange of experiences on the successful establishment of bio-based value chains and networks;
- promoting education and research, the transfer of bioeconomy know-how and technology, in particular to developing countries, and the training of experts in the food and non-food sectors;
- providing and evaluating data, both nationally and internationally, on the different ways of using plant-based biomass in order to establish a reliable basis for policy decisions;
- promoting scientific studies on synergies and trade-off effects between the production of renewable resources for the food sector and for the non-food sector.

#### Ensure sustainability of production and use

Bioeconomy is based on natural resources. The sustainability of producing for the food and non-food sectors depends on a number of crucial factors: the conservation and sustainable use of biological diversity, the careful stewardship of soil and water, and equitable access to and use of natural resources. Sustainability of production and use also requires a resource-efficient increase in agricultural production, an improvement of agricultural know-how and training and a reduction of food losses which go hand in hand with environmental protection, nature conservation and climate stewardship and also include social aspects and agro-ecological practices.

The "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security" and the "Principles for Responsible Investment in Agriculture and Food Systems", both adopted by the Committee on World Food Security (CFS), which is hosted by the Food and Agriculture Organisation of the United Nations (FAO), are important milestones on the way to more sustainability. Accepted international voluntary and market-based production standards and sustainability certificates can help protect the natural means of production and at the same time increase consumer acceptance for sustainably produced, bio-based products. Existing systems offer a good platform for further development. Furthermore, we appreciate the sustainability indicators developed by the Global Bioenergy partnership (GBEP).

## We, the agriculture ministers assembled at the GFFA 2015, advocate:

- expanding and improving sustainable agricultural production methods and the use of
- → renewable resources with the aim of sustainably managing natural resources and
- supporting climate stewardship through the mechanism of knowledge, adaptation and mitigation funds;
- → transferring know-how and technology, in particular to developing countries, in order to support international efforts to make the production of renewable resources for the food and non-food sectors sustainable;
- → implementing and applying the "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security" and the "Principles for Responsible Investment in Agriculture and Food Systems" at regional, national and local level, and we support the FAO in its efforts;
- → developing voluntary sustainability standards and certification systems on a partnership basis;
- promoting the development of scientific analysis related to sustainable methods of production and the use of renewable resources;
- → improving consumer-awareness about sustainable, bio-based products.

#### **Ensure the primacy of food:**

Further expansion of bioeconomy is only acceptable if feeding humankind takes priority.

The current growing demand for renewable resources for the non-food sector coincides with a growing global population that must be provided with an adequate supply of food. To achieve the priority goal of ensuring food security while at the same time taking full advantage of the potential of the bioeconomy, production must be sustainably increased, losses must be reduced, and efficiency of use must be enhanced by methods such as the coupling and cascading of uses. These methods allow the processing of agricultural biomass into high-quality food/feed products or materials for industry. Arising residues can be used to produce bioenergy.

Scarce resources, such as land, water or nutrients, should be used in an environmentally sound and efficient manner. In certain regions the demands for renewable resources on the one hand and for food on the other may lead to increased competition for land and water. Land should not be used for non-agricultural purposes or for growing renewable resources at the expense of food security. The loss of productive land should be reduced.

Agricultural policy - in conjunction with globally coherent economic, trade, energy, environmental, research and development policies - must play its role in taking advantage of the opportunities provided by bioeconomy, monitoring and balancing the different uses and reducing the risk of excessive price volatility. A coherent policy and legislative framework for production and for markets supports food security.

We appreciate and acknowledge FAO's work in this regard, in particular the Bioenergy and Food Security (BEFS) Approach, which provides a sound foundation for making policy decisions that ensure the primacy of food security in the context of bioeconomy.

### We, the agriculture ministers assembled at the GFFA 2015, advocate that

- the sustainable production of food remains the priority goal of bioeconomy, bearing in mind the Zero Hunger Challenge launched by the UN Secretary General Ban Ki-moon;
- → the "Global Strategic Framework on Food Security", the "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security", the "Principles for Responsible Investment in Agriculture and Food Systems" and the "Voluntary Guidelines on the Right to Adequate Food" are implemented and applied at regional, national and local level and that the Rio + 20 document "The future we want" is taken into due account;
- rural development strategies take different uses of agricultural biomass into account while respecting the primacy of food security;
- the policy impact assessment of any expansion in the cultivation of renewable resources pays due regard to the growing need for an adequate and nutritious supply of food;
- strategies and concepts for using agricultural land for non-agricultural purposes take account of the potential impact on food security, rural development policies and domestic value-added initiatives;
- innovative procedures, such as coupled and cascade use of biomass, are deployed to activate the unexploited potential of raw materials and residues;
- an international exchange of best-practice examples is promoted to implement the primacy of food security in regional, national and local strategies on rural development;

- → FAO continues and intensifies its work on the primacy of food security in bioeconomy and provides information and pertinent policy advice for the benefit of its members;
- the measures adopted by GFFA 2014 on increasing productivity are supplemented by appropriate measures for increasing resource efficiency and minimising losses.

We emphasise that secure supplies of food, raw materials and energy, and indeed climate stewardship and nature conservation, are inconceivable without the sustainable production of biomass for the food and non-food sectors.

Hence bioeconomy links agriculture to global sustainability policy and assigns agriculture a central role in tackling the great challenges of our time.

We take on our responsibility in the international dialogue and press for the appropriate recognition of the importance of agriculture in the process of finalising the United Nations' Sustainable Development Goals.

We therefore advocate the development and implementation of coherent policy frameworks for sustainable bioeconomy that enable the agricultural sector to provide an adequate and nutritious supply of food and at the same time to produce renewable resources for material and energy production. This issue should be further discussed in the context of Expo 2015.

We, the Agriculture Ministers, hereby state that tangible action and international cooperation are necessary to seize the opportunities provided by sustainable bioeconomy for agriculture and rural development while securing the primacy of food security and nutrition. We wish to follow up on these thoughts and believe that FAO in collaboration with other partners would provide the appropriate platform for this purpose.

## Participating countries Berlin Agriculture Ministers'Summit 2015

Republic of Albania

People's Democratic Republic of Algeria

Argentine Republic Republic of Austria Republic of Azerbaijan Republic of Belarus Bosnia and Herzegovina Republic of Botswana Republic of Bulgaria Republic of Chile

People's Republic of China
Republic of Croatia
Republic of Cyprus
Czech Republic

Arab Republic of Egypt Republic of Estonia Republic of Finland

Georgia

Federal Republic of Germany

Republic of Ghana Republic of Hungary Republic of Iraq Republic of Italy

Japan

Republic of Kazakhstan Republic of Kosovo Kyrqyz Republic

Lao People's Democratic Republic

Republic of Latvia

Principality of Liechtenstein Grand Duchy of Luxembourg Former Yugoslav Republic of Macedonia

Republic of Malta

Moldova Mongolia Montenegro

Federal Democratic Republic of Nepal

Kingdom of the Netherlands Republic of the Niger Palestinian Territories

Poland

Portuguese Republic

Romania

Russian Federation Republic of Serbia Republic of Sierra Leone Slovak Republic Republic of Slovenia

Republic of Slovenia Republic of South Africa Kingdom of Spain Republic of the Sudan Kingdom of Sweden Swiss Confederation

United Republic of Tanzania Kingdom of Thailand Trinidad and Tobago Republic of Turkey

Ukraine

Eastern Republic of Uruguay Republic of Uzbekistan Socialist Republic of Viet Nam

Republic of Yemen

#### **International Organizations:**

European Commission, Food and Agriculture Organization of United Nations (FAO), Worldbank

### International Business Panel

## Growing demand for food, fiber and energy: Opportunities for agriculture and the industry; Challenges for food security and sustainability

The global agriculture and food industry is expecting unprecedented growth opportunities because of increasing demand for agricultural products, for food, fiber and energy. Natural resources are limited on our planet; therefore meeting the future demand for agricultural raw material is the biggest challenge for the sector which we have faced so far. However, the challenge could be a pivotal driver for innovation." With these words *Dr. Thomas Kirchberg*, Member of the Board of Management of Südzucker AG and Chairman of the German Agribusiness Alliance, Committee on Eastern European Economic Relations, inaugurated this year's International Business Panel on behalf of the organizer, the Global Forum for Food and Agriculture Berlin (GFFA Berlin e.V.), as part of the International Green Week 2015.

Under the topic "Food Security: Growing demand for food, fiber and energy: Opportunities for agriculture and the industry; Challenges for food security and sustainability", the participants of the International Business

Panel discussed the challenges of global hunger, undernutrition and malnutrition and the realistic potential for a sustainable increase in food production. They agreed that an increase in agricultural production must go hand in hand with the sustainable use of soil and water, biodiversity conservation and climate protection.

The panelists of the first round of discussions explored in depth the challenges and chances of a growing demand for food, fiber and raw material and the rising need for sustainable production. *Dr. Shenggen Fan*, General Director of the International Food Policy Research Institute (IFPRI) emphasised in his keynote speech the role of bio economy which must first of all provide for food security and healthy nutrition.

*Dr. J.B. Penn*, Chief Economist of John Deere & Company approved *Mr. Fan's* statement and added: "The focus on innovation and higher productivity should cover all farmers, all sizes of farms and all regions."



International Business Panel Discussion at the Deutsche Telekom building



First Panel, from left: Facilitator Conny Czymoch, J.B. Penn, Ajay Vir Jakhar, Klaus Josef Lutz, Michael Windfuhr, Shenggen Fan

With regard to developing countries such as India and Africa, *Ajay Vir Jakhar*, Chairman of the Indian Farmers' Organization "Bharat Krishak Samaj", referred to already existing innovative technologies and regretted that these innovations were not yet reaching the individual family farms. He asked for "extension services, which transfer the knowledge that exists already into agriculture on the field." As an example he mentioned "health guards for the soil". He thought that the objective must be to have a stable economy, to save the environment, to use fewer inputs and thus to increase profits."

International Business Panel Discussion at the Deutsche Telekom building

Prof. Klaus Josef Lutz, Member of the Board of Management of BayWa AG, elaborated on the necessity of knowhow transfer which should lead to the expansion of new technologies like "smart farming" or "precision farming". He explained however: "It is not only about the transfer of technologies, but overall about improved skills in agricultural processes."

In light of the rising investments in agriculture, *Michael Windfuhr*, Board Member of the German Institute for Human Rights, warned against possible conflicts that may arise in the use of natural resources and stressed the social consequences: "Investments are highly needed but they also require a responsible and flexible approach by governmental bodies and industries."

The focus of the second panel discussion was the question of how can we produce more and better, while protecting the natural resources, the climate and the environment.

In his keynote speech *Dr. Jürgen Vögele*, Senior Director Agriculture Global Practice, World Bank Group, was concerned about the fact that "the climate contribution of our agriculture system globally accounts for 25 % of all worldwide greenhouse gas emissions" and concluded that "we are far away from a globally sustainable agricul-



Second Panel, from left: Bernd Naaf, Evelyn Nguleka, Jürgen Leiße, Vladimir Rakhmanin, Conny Czymoch

ture production and that we have a long way to go to get there." He pointed out that "if we want to feed 9 billion people by 2050 we will have to look seriously at the risks in the supply chains, both locally and globally." He called for a climate-friendly agriculture with a clear focus on high productivity and resilience.

Bernd Naaf, Member of the Board of Management of Bayer CropScience AG, stressed the risks for yield losses in agriculture due to climate changes and mentioned as an example yield decline for rice of 7% - 27%. He urged that crop plants and their cultivation methods needed to be better adjusted in the future to the expected climate changes.

Dr. Evelyn Nguleka, President of the World Farmer's Organization (WFO), pointed out that "no matter how brilliant the technology is, if it does not reach the farmers, it is useless." Ms. Nguleka added that this also applied for biotechnology practices. She also highlighted the good experiences of cooperation of farmers in the collective use of agricultural equipment, which is successfully supported by the BMEL and the DBV.

Jürgen Leiße, CEO of Mondelez Germany GmbH, stated that the production of cocoa was a major cause of deforestation. He explained that better cooperation between

farmers and industry could generate win-win situations. He said that it was therefore necessary to provide more and better information and advice to farmers about plant protection and soil fertility in order to generate higher yields per ha. He continued by saying that, as a result, the excessive strain on natural resources would be able to be reduced sustainably.

In addition to knowledge transfer, the increase in productivity and the need for close partnership, *Vladimir Rakhmanin* of the Food and Agriculture Organization (FAO), laid strong emphasis on the need to avoid food losses and food waste. "No sustainability can be achieved unless we eradicate hunger and poverty," he said.

### **Imprint**

#### Publisher

Federal Ministry of Food and Agriculture (BMEL) Division 625 East Europe, Central and East Asia, Enlargement, Global Forum for Food and Agriculture (GFFA) Wilhelmstraße 54 10117 Berlin | Germany

#### Current as of

March 2015

#### Text

**BMEL** 

#### Design

 $design.idee, b\"{u}ro\_f\"{u}r\_gestaltung, Erfurt$ 

#### Picture credits

BMEL/photothek.net/Thomas Köhler Julian Laidig/BMEL Luca Abbiento/BMEL GFFA/Nils Krüger Logo IYS – zur Verfügung gestellt von der FAO

#### Printed by

BMEL

This brochure is issued free of charge within the framework of the public communications work of the Federal Ministry of Food and Agriculture. It is not permissible to use it in the context of electoral promotion of political parties or groups.

Further information is available in the Internet at www.bmel.de

