

## EU-AU-IIASA Evidence and Policy Event

JRC-Ispra, 30<sup>th</sup> August – 2<sup>nd</sup> September 2016

### MASTERCLASS ON

### Wicked problems: dealing with scientific and political controversies

#### 1) **Facilitator name and institute**

Rob Maas, RIVM - Netherlands

#### 2) **Objective**

The objective is to gain practical experience in dealing with ‘wicked problems’. Wicked policy problems are cases with large scientific uncertainties and strong normative controversies.

#### 3) **Outline**

The masterclass will focus on a hypothetical trade agreement on food between the EU and Africa. Free trade of food products can lower food prices and increase food security. On the other hand it could contribute to local water shortage or increased greenhouse gas emissions, e.g. due to the use of fertilizers. In addition, food safety is an issue. Can the market be organised in such a way that these negative side effects will be negligible? Is national or international regulation required?

#### 4) **Format**

Role-playing. Duration 90 minutes, 7 participants

#### 5) **What skills will scientists learn? What skills will policymakers learn?**

Scientists will learn that when science is not conclusive, normative perspectives will dominate the debate. In such cases, scientific evidence is used to strengthen the bargaining position. Participants could learn how to handle in such situations. Policy makers could learn how to make a policy strategy more robust when taking into account multiple scientific theories.

#### 6) **Any technical/logistical requirements (e.g. beamer, flipchart, materials needed)**

2 flipcharts, post-its, markers

1 PC and beamer



## Towards a food trade agreement between Africa and the EU

We simulate the final negotiations between the EU and the African Continental Free Trade Area (CFTA) on removing barriers for trade in food products between the two blocks.

The agreement should benefit economies in EU and Africa, reduce food prices and increase food security. The outside world is anxiously awaiting the results of the last high-level meeting. The political stakes are very high, but there are still uncertainties around the impacts on employment, food safety and the environment due to disagreements among scientists. After many earlier attempts to strike a deal, negotiators have raised the expectation that an agreement is finally within reach. A failure would certainly mean the end of the career of all involved in the process.

There are six policy makers and one chairperson involved:

1. DG Trade EU
2. DG Regulation and Sustainability EU
3. DG Environment EU
4. DG Trade CFTA
5. DG Regulation and Sustainability CFTA
6. DG Environment CFTA
7. A neutral chairperson is responsible for the process and the final text of the agreement.

The challenge is to reach a robust agreement that is resistant to contradicting scientific evidence and potential changes in political majorities. Currently the views of each policy maker will be backed by around 30% of their population. The final agreement should at least be based on a majority in each of the two blocks (i.e. 2 out of 3 players), but the outcome will be more robust if concerns of all parties are taken into account.

The role game takes 90 minutes. Indicative timing:

1. 00-10 min: Reading the material
2. 10-30 min: Coordination within the EU and CFTA respectively (2 groups of 3 players): exchange of positions, propose a common objective and title for the agreement, suggestions for the draft text, appoint spokespersons.
3. 30-40 min: First Plenary negotiation round: explanation of positions of EU and CFTA via the chair, feedbacks from the others, general directions for the changes in the text of the agreement, identification of further work.
4. 40-60 min: Internal consultation and/or bilateral drafting groups to prepare elements of the text of the agreement.
5. 60-80 min: Second Plenary negotiation round: amending the text, remove square brackets (use beamer).
6. 80-90 min: Discussion on the envisaged policy risks and ways to improve the robustness of the agreement text.

Group results in each of the masterclasses will be compared as follows:

No agreement	0 pts
Creative ways forward	1-4 pts
Agreement with 4 players	5 pts
Agreement with additional robustness procedures	6-9 pts
Full consensus with 6 players	10 pts

*Be hard on the content and soft on the person ... and be creative!*



DRAFT TEXT

*Text between square brackets to be confirmed or adapted*

**EU/Africa agreement on [trade and development]**

- Acknowledging the benefits for [prosperity] and food security,
- [Also taken into consideration the impacts on food safety, the environment and human rights],

the EU and the African CFTA have agreed:

1. To [lift] [adapt] levies and bans on the import and subsidies on the export of [certain] food products [temporary exemptions for certain countries],
2. To stimulate easy access in Africa for [foreign investors/joint ventures] in the food production sector,
3. [To guarantee the safety of exported/imported food] [tbd how],
4. [To protect natural resources, such as water and forests from increased agricultural production and biofuel production] [tbd how],
5. [To ensure good labour conditions] [tbd how],
6. [EU governments will create a fund to invest in education programs, government capacity building and infrastructure improvement in Africa, financed either by voluntary donations from industries profiting from investments or exports to Africa, or by a new tax].

*The agreement can refer to further details in annexes. There is no need to work out these annexes, as long as there is a common understanding of what its content should be.*



## Guidelines for the chair

Your role is crucial for getting a good outcome! You will only be happy when there is a full consensus because that guarantees that the agreement will be ratified by parliaments and that the text is robust, meaning less dependent on changing political majorities. But, you also have to be realistic and remember that the best agreement is the enemy of a good agreement.

1. Keep to the time table!
2. Keep the plenary sessions short and formal, focus on the main task of the group: getting an agreement. If helpful, organise bilateral drafting groups and allow for (short) internal consultations within EU or CFTA.
3. Remember you are neutral; your ambition is to get an agreement in the next hour!
4. Listen to the various arguments during the plenary sessions and - as an observer - during the group sessions. Try to accommodate new suggestions in the draft text of the agreement.
5. Ideally, policy decisions should be based on science; otherwise, it will be hard to survive the required formal impact assessment. If not already made clear in their statements, ask parties what evidence underpins their choices.
6. Mediate where possible. Stimulate parties to listen to each other, and not only try to convince the others. This negotiation is not about winning, but about co-operation!
7. Keep on board as many participants as possible. Prevent personal clashes: promote the common objective. Remember parties that an agreement requires that sacrifices have to be made by each of them, otherwise everyone will lose!
8. Try to identify what the various trade-offs are (e.g. between removing trade barriers and setting uniform environmental standards, between private responsibilities for food safety or government controlled food control, or between private or public funding of infrastructural improvements). Stimulate parties to find compromises for each of the trade-offs.
9. Ask questions: what risks are involved if we neglect (science based) warnings from other parties? How likely are such warnings? What would be risk if such warnings would become reality? How can we minimize such risks?
10. Make sure there is a readable agreement text available at the end (use the beamer).





## DG Trade EU

Your approach is based on the science that removal of trade barriers such as import levies and legal constraints increases welfare. According to *Adam Smith*, the invisible hand of the free market will optimize welfare. History proves the strong linkage between free trade agreements and welfare growth in the world. Economies of scale will lead to lower prices. Of course some activities will move (as was the case with the textile industry in Europe), but in the past they were replaced by new innovative activities. Based on theorems of *Heckscher, Olin and Vadek*, large economic benefits are estimated if Africa would specialize on the export of fruit & vegetables and Europe on the production of meat and dairy products. Africa, with its growing population will become a large export market for European dairy farmers and food industries. At the same time, Africa is attractive for investments in agriculture as it offers a large potential of cheap land and of young cheap labour.

Evidence from *C.K. Prahalad* proves the ‘trickle-down effect’: all people will benefit; not only the wealthiest. More employment and lower food prices will lead to a higher buying power at the bottom of the income pyramid, both in Europe and in Africa.

We cannot avoid income inequality. It is the engine behind economic growth. Without inequality, there would be no incentives for investments and hard work.

In order to attract European investors in food production in Africa, we need less regulation, no additional regulation on food safety, water resources or deforestation. Every constraint to free trade costs money, as linear programming models clearly show. This would lead to higher food prices and be at the expense of the low income groups.

It is your vision that companies are responsible for damage and have to guarantee food quality, good labour conditions and the sustainable use of natural resources. Companies will take their corporate social responsibility and report or compensate when damage occurs. Bureaucratic agencies are not needed and would be too costly.

Investing in agriculture in Africa requires co-financing of infrastructural improvements and training of personnel. The more the costs of investments in infrastructure and education are financed from public funds, the more likely the success of the trade agreement will be. Your business friends convinced you that private money cannot be used to train potential competitors.

You will take a leading role in the upcoming negotiations. You are convinced that a trade agreement would be good for everyone and that it will create an attractive investment climate in Africa with long-term legal certainty for investors. The last thing investors could accept is that that rules will change ‘during the game’.

*In short, your main goals are to:*

- *Remove trade barriers;*
- *Limit administrative costs due to government regulations;*
- *Avoid financial contribution to development aid programs by investors.*



## DG Regulation and Sustainability EU

A trade and development agreement with Africa is strongly needed in order to limit immigration from Africa to the EU. Immigration models show that the large gap in welfare and job opportunities between Africa and Europe is the main driver behind immigration. Immigration blockades have proven to be hardly successful. An agreement on food trade is the first step in a broader economic development strategy for Africa.

Unbounded free trade is not the right way forward. We need a level playing field: environmental protection, food safety and human rights (e.g. child labour and labour conditions) should be included in a trade and development agreement; otherwise, a growing share of the European consumers would not buy products from Africa. Footprint studies of the *JRC* have shown the already now, imports of fruits and vegetables from Africa contribute to water shortages and deforestation. Imports from Africa should become sustainable and appropriate regulations should be part of the deal. This also requires education and capacity building programmes to encourage best practices and good government in Africa.

In order to guarantee food safety, the mandate of the European Food Safety Agency should be expanded. Inspection costs should be covered by the importers of food. A new Public-Private Body to guarantee food safety would also be an option, if industry would object to expanding the EFSA-mandate.

Not everyone will profit from free trade. Nobel Prize winners *Krugman and Stiglitz* have proven that it will accumulate wealth in the pockets of the rich. In order to gain public support a just redistribution of the benefits from the trade agreement is vital.

Consumers should profit via lower food prices, but small farmers should not be the victims of the deal. In order to keep jobs in European agriculture and to maintain the European landscapes, new ways to finance small-scale farmers should be included. However, this should be done in a budget neutral way as agricultural subsidies are already under the pressure of budget cuts. It is inevitable that large industrial sized farms and food processing industries that profit from a Trade and Development Agreement will have to contribute via a levy.

To cover the investment costs for infrastructure, education and governance capacity building in Africa a large proportion should be co-financed by the investors in African agriculture, because they would benefit most from lifting trade barriers.

You are convinced that a full consensus with stakeholders and co-financers can be reached and that the agreement will be based on a well-balanced assessment of the benefits and acceptable external costs for societies and the environment.

*In short, your main goals are to:*

- *agree upon a level playing field for human rights, environmental protection and preservation of unique landscapes;*
- *guarantee food safety;*
- *organise a budget neutral financing system for economic development in Africa to limit immigration.*



## DG Environment EU

Trade liberalisation is not an end in itself. Eradicate poverty and hunger and a sustainable use of natural resources are crucial goals for future development. The focus on gross national income as the key indicator for the expected success of a trade agreement is too narrow, as it doesn't say anything about the distribution of wealth and the loss of natural resources (as was argued in the *Stiglitz-Sen-Fitoussi commission* ([http://www.insee.fr/fr/publications-et-services/default.asp?page=dossiers\\_web/stiglitz/documents-commission.htm](http://www.insee.fr/fr/publications-et-services/default.asp?page=dossiers_web/stiglitz/documents-commission.htm))).

An agreement between the EU and Africa should be a sustainable development agreement and not focussed on trade liberalisation. The environmental footprint of the EU is already much too large. According to the *European Commission* white paper on resource efficiency we import 50% more biomass in Europe than we export. We need to move towards a Circular Economy. According to *JRC-estimates* we would need three Europes if we would have to produce all the goods we consume domestically. Further dependence on food imports would reduce food security in Europe. We would become more dependent on weather extremes, droughts and political instabilities in Africa. Already now the production chain is controlled by a handful of food companies (see *Westhoek, et al. The Protein Puzzle, 2011*). A larger concentration of power will ultimately lead to monopolies and an increase in food prices.

Moreover, food safety is an issue. Nowadays an increasing number of consumers prefer to buy healthy food from nearby farms, not from an anonymous producer in Africa. Moreover, with an ambitious climate policy the costs of intercontinental transport of goods will become prohibitive.

Public trust in ecolabels on imported products, guaranteeing they are produced 'organic' or 'fair', has declined. Trust should be restored through labelling by independent bodies. Animal welfare also gets more and more attention. There is a long term transition in Europe going on towards healthy and sustainable diets. A reduced intake of meat and dairy products by 30% and an increased intake of (organic) vegetables would reduce the land area needed for agriculture, the losses of greenhouse gasses, as well as water consumption by more than 20%. At the same time, it will increase average healthy life expectancy by 2 years (*Westhoek, Sutton et al., Food choices, health and environment, in: Global Environmental Change, 2014*).

There is a growing support among European citizens to take responsibility for global sustainable development and to support programmes in Africa to improve education, infrastructure and government capacity building. To finance this, a sustainable development tax on products and activities is preferred. Such a tax can best be based on the negative external effects of polluting activities.

Changes in trade between EU and Africa would merely be the result of a sustainable development agreement and not its main purpose. You intend to contribute to a constructive final dialogue with the other parties involved in order to make a significant step in the right direction. Polls show that a growing share of the European citizens backs your ideas. Sooner or later, a change in a sustainable direction is imminent.

*In short, your main goals are to:*

- *get the focus of the agreement on sustainable development in Africa and the EU*
- *ban imports of goods from Africa that are produced unsustainable*
- *arrange publicly trusted fair trade labels*



## DG Trade CFTA

According to reports from World Bank Development Research Group (*Dollar and Kraay, Trade, Growth and Poverty*) trade liberalisation is the main precondition for economic development and poverty reduction in Africa. Africa has a vast supply of natural resources and cheap labour. Africa will be able to produce fruits, vegetables and flowers at competitive prices. Investments in good infrastructure, good entrepreneurial skills and training programmes for a competent middle management are required. The challenge is to find funding for such investments.

It is not the ambition of African food producers to be merely an exporter of cheap basic ingredients to Europe, where such ingredients will be manufactured into high value processed food (preserved fruits and vegetables, prepared meals, etc). Such processed food products will be too costly for African consumers and only be sold in Europe. The trade agreement should form the framework to set up joint ventures with European investors to process food in Africa at competitive prices. Equal sharing of knowledge and profits should be the basis of such joint ventures. African counterparts know best how to find their way through the African bureaucracy in order to get the necessary permits for new investment projects.

In order to be able to develop a competitive processed food industry it is required that until 2030 African governments subsidize the production and export of processed food to the EU.

For the moment, we have to accept that environmental regulations and labour condition standards are still rather weak. Hunger and unemployment urgently need action, otherwise political instability cannot be avoided. Long term sustainability issues will have to wait. With rising incomes, it is inevitable that such regulations will get increasingly important (see: *Acemoglu and Robinson, The political economy of the Kuznets curve, Review of Development Economics, 2002*). But, for the moment poverty reduction and economic growth are the political priorities. Full stop.

Income inequality will remain to exist in the coming decades. But, according to *World Bank experts* the poor will also profit from trade liberalisation and hunger and unemployment will be reduced. There is no other alternative. Central planned food production with state owned farms have proved to be a failure around the world.

During the negotiations you will show that you can become a trusted partner for European investors. Together you are stronger in the battle against hunger and poverty.

*In short, your goals are to:*

- *get access to EU-knowledge on food processing in Africa via joint ventures;*
- *keep government subsidies for food processing in order to build up a competitive sector;*
- *agree to implement environmental regulations and labour condition standards after 2040.*





## DG Regulation and Sustainability CFTA

Africa has a vast supply of natural resources and cheap labour. In the long term, Africa has a competitive advantage in the production of fruits, vegetables and flowers. However, that urgently needs investments in infrastructure and education. The EU-CFTA agreement on trade and development should be the framework for investments in the food sector in Africa. You don't want Africa to only be an exporter of cheap basic food products, but also would like to attract multinational investors in establishing a high value processed food industry (preserved fruits and vegetables, prepared meals, etc). In order not to discourage investors, you cannot set strong conditions. Your priority is to ensure that profits from joint ventures in Africa will be reinvested in Africa.

You want the negotiations on the trade and development agreement to be successful, as without a flourishing food sector, rural unemployment and hunger would destabilise the country. Progress is needed, even if this would increase inequality as *Krugman*, *Stiglitz* and *Piketty* have predicted. *C.K. Prahalad* has shown that a small part of the progress will trickle down to the poor and will contribute to eradication of hunger.

You agree that a level playing field for producers in the EU and Africa is the ultimate goal. Tariffs and subsidies should disappear and regulations on environmental issues, food safety and labour conditions should be harmonised. However, more time is needed for a full harmonisation; see the comparable examples in *Asia*: Japan, Taiwan and Korea also protected their industry for at least 10-20 years in the 1960s and 1970s in order to build up a competitive industry.

The free market will not automatically preserve common goods such as nature, clean air and water. Numerous examples have shown this. Legal internationally agreed constraints to the free market are required. In order to create a countervailing power against the power of multinationals, Africa is in favour of strong international institutions and is prepared to start the process of ratifying multilateral environmental and social agreements. In order to be able to enforce future regulations on food safety, water use, greenhouse gas emissions, forest protection, and labour conditions, EU financed programmes for government capacity building are needed.

Africa is prepared to take its global responsibility for tackling climate change and nutrient losses. Africa is a global example in the efficient use of nutrients. More than 90% of the nutrients added, is actually consumed as food. Food is hardly wasted and the agricultural losses of nutrients to environment are low (See *UNEP report Our nutrient world*, by *M.A. Sutton, et al. 2013*). In Europe, almost 40% of the nutrients is lost to the environment. Almost half the food produced is thrown away. As part of the agreement, you would like to see that a level playing field between EU and CFTA for nutrient efficiency targets is included. This would reduce global emissions of  $N_2O$ , a potent greenhouse gas, as well as the pollution of lakes and coastal sea.

*In short, your main goals are to:*

- *acquire funding to improve the quality of governments in Africa in order to balance the power of multinationals.*
- *reinvest the profits from African food industry in Africa.*
- *agree that the immense losses of nutrients in the EU food chain should be brought down (level playing field!)*



## DG Environment CFTA

Africa is a continent with a large cultural diversity and a large diversity of ecosystems and species. Examples in developed countries clearly show how trade liberalisation diminished cultural diversity and biodiversity (see: Noreena Hertz, *The Silent Takeover*, 2001). Governments and multinationals are mainly focussed on increasing profits and do not take the value of culture and nature into account (see: Douglas Irwin, *Against the tide, an intellectual history of free trade*, 1996).

Sustainable development cannot be left to multinationals or international organisations. We need to focus on local democratic solutions, educate small-scale farmers to ensure local self-sufficiency, use water and nutrients in a sustainable way, avoid the use of pesticides and respect wild life.

We should not sell our precious natural capital to multinational companies. Tropical rain forests should not be replaced by large scale export oriented agriculture of biofuel production. Land use studies have shown this risk (see: B. Eickhout et al. *Economic and ecological consequences of four land use scenarios*, in: *Land Use Policy*, July 2007). African land is needed to feed African people, not pigs or cars in Europe!

Hot spots of biodiversity should be protected (financed with crowd funding). Global membership of the *World Wildlife Fund* is continuously increasing, despite economic recession. E.g. there is a high willingness to pay for the protection of the white rhinoceros. Moreover, eco-tourism is important for local economies and could offer the financial means for the protection of forests and characteristic landscapes.

Education is crucial for sustainable development in Africa. Wolfgang Lutz of IIASA has shown the significant impact of education on birth control and health (Wolfgang Lutz, Samir KC, *Global Human Capital: Integrating Education and Population*, Science 2011). Good education requires that children are able to go to school and that child labour is banned. Clean and cheap (solar) lights are needed to enable children to study during the evening. Clean cook stoves are needed to prevent asthma and other lung diseases of children as was recently propagated by the WHO. Education is also instrumental in promoting healthy life styles, avoidance of sexually communicable diseases and in raising environmental awareness.

Direct support from EU citizens and cooperation via twinning of local communities in EU and Africa could ensure that available means are used most efficiently and prevent that donations are lost in the bureaucratic system.

Instead of a trade agreement, you would favour a framework for good bilateral cooperation between local communities in Europe and Africa. In any case, the agreement currently under discussion should not harm your strategy but should be rather supportive to it.

In short, your main goals are to:

- improve local knowledge and small scale initiatives via twinning projects;
- to limit land grab by large multinationals;
- to focus development programs on education for al.

