Global Forum on Food Security and Nutrition

Proceedings

Examining the linkages between trade and food security: What is your experience?

Collection of contributions received

Discussion No. 111

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Introduction to the topic

Examining the linkages between trade and food security: What is your experience?

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There are many ways that trade agreements and rules may influence food security positively or negatively. The relationship is complex. Furthermore, agreements and rules governing trade are one force among many having an impact on food security. It is not surprising then that views about the effect of trade rules and agreements on food security vary depending on one's personal and professional experience and expertise, in addition to what is being measured and which affected stakeholders are being examined.1 As the most recent State of Food Insecurity in the World report has stated, the need for coordination among "compartmentalized" interests "requires an enabling environment that allows and creates incentives for key sectors and stakeholders to sharpen their policy focus, harmonize actions and improve their impact on hunger, food insecurity and malnutrition." 2

The dominant narrative put forward by advocates of trade liberalization is that food security is enhanced under an open trade model. Specifically, pro-liberalization advocates make the case that a more open trade regime promotes more efficient agricultural production, which results in an increase in food supply and in turn lower food prices. In other words, they argue that more open trade policies should make food both more available, and more affordable. 3

Others argue that trade agreements and rules have facilitated the spread of high-input, high-yield agriculture and long-distance transport increasing the availability and affordability of refined carbohydrates (wheat, rice, sugar) and edible oils. Some parts of the global population have therefore been made more secure in terms of energy, but also more susceptible to the malnourishment associated with dietary simplification and to growing over-consumption and associated chronic diseases.4 In addition, it is argued that trade agreements and rules either leave out or undermine small-scale farmers. Of specific concern are small-scale farmers working in agro-biodiverse systems, because this group is particularly critical to food security both locally and globally.5

Purpose:

The purpose of this online consultation is to share experience in order to unpack the linkages between trade rules, food security6 and the measures taken to support it.

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1 See for example, Clapp, Jennifer (2014) *Trade Liberalization and Food Security: Examining the Linkages.* Quaker United Nations Office, Geneva.

2 FAO, IFAD and WFP. 2014. *The State of Food Insecurity in the World 2014. Strengthening the enabling environment for food security and nutrition*. Rome, FAO

3 See Pascal Lamy, 2013. "The Geneva Consensus: Making Trade Work for Us All." Cambridge, Cambridge University Press.

4 See for example, De Schutter, Olivier (2011) *Report submitted by the Special Rapporteur on the right to food, Olivier De Schutter. A/HRC/19/59*

5 (for more on the importance of these producers see, Bragdon, Susan (2013), *Small-scale farmers: The missing element in the WIOP-IGC Draft Articles on Genetic Resources* (p2&3) Quaker United Nations Office, Geneva and, Wise, Timothy (2014) *Malawi`s paradox: Filled with both corn and hunger*, Global Post.

6 The 1996 World Food Summit defines food security as existing "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life." Four pillars of food security are associated with this definition: availability, access, stability and utilization.

Small-scale producers in agro-biodiverse systems are critical to the stability dimension of food security because of the resilience provided by a diversity of management practices and resources. This is especially important in an era of increasing and unpredictable global change. Dietary diversity is a critical health indicator flowing from a diversity of what is grown, again highlighting the importance of this type of producer. One question will therefore focus specifically on the relationship between trade agreements and rules and these producers.

Questions:

In order to learn from your experience I would like to invite you to reflect on the following questions:

1. From your knowledge and experience how have trade agreements and rules affected the four dimensions of food security (availability, access, utilization, stability)?

2. What is your knowledge and experience with creating coherence between food security measures and trade rules? Can rights-based approaches play a role?

3. How can a food security strategy, including components that explicitly support small-scale farmers in agro-biodiverse settings, be implemented in ways that might be compatible with a global market-based approach to food security?

We would like to thank you in advance for your participation in this online consultation. It will greatly help QUNO and FAO in further developing a knowledge base to support our shared goal of ensuring that global governance, and in particular trade agreements and rules, reinforces and does not undermine food security.

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Economist - Trade and Markets Division
Food and Agriculture Organization of the United Nations
Rome

Contributions received

1. George Kent, Department of Political Science, University of Hawai'i, United States of America

Greetings –

International food trade can contribute to the food security of those who are well off, but it tends to work against the interests of poor people who are not food producers and the small-scale producers who are not selling into the major markets. Thus trade is not a good means for ending hunger.

Some people think of the commodity-based global food system as if it were the only one, but for many people there are separate local food systems that have little connection with the global one. Small local farms, often dismissed as "inefficient", play a crucial role in providing low-cost foods to the local poor. If those small local farms are consolidated, and made more "efficient", perhaps under the ownership of outsiders, they are likely to ship their products out to people with money, whether in the same country or abroad. The local poor are bypassed.

Also, new large scale-farms are likely to do much more harm to the local environment than the agro-ecology that is traditionally practiced on small local farms.

Food exports from poor countries produce benefits for local people, but the distribution of those benefits is likely to be highly skewed, with much of the benefit going to outsiders, the local rich, and the government, not to those who work in the fields, and not to local non-farmers.

Many poor countries see trade agreements as increasing their vulnerability to exploitation by powerful outsiders. They become especially vulnerable when the agreements prohibit making any restrictions on imports. Powerful outsiders can easily displace local producers.

In the case of the North American Free Trade Agreement, for example, it was clear from the outset that small-scale corn producers in Mexico would be hurt as a result of massive imports of subsidized corn from the United States into Mexico. The pressure to open domestic markets to foreign suppliers often means the flooding of domestic markets with food from outside. Local food producers cannot compete with the imports, with the result that their incomes plummet, destroying their food security.

The division between international trade advocates and its critics can be understood in terms of two connected points: markets are beneficial mainly to the rich and powerful; and strategies of self-sufficiency are beneficial mainly to the poor and weak.

This explains why the strongest advocates of free trade are the rich, and the strongest advocates of self-sufficiency are the poor and their friends. Strategies of self-sufficiency protect the weak from potentially exploitative relationships with those who are stronger.

Richer countries promote trade in a way that suggests it would be beneficial to all, but it would not be equally beneficial, and it certainly would not favor the poor. Trade tends to provide its greatest benefits to those who are more powerful. It contributes to the widening of the gap between rich and poor. The market system promotes the flow of food and wealth toward money and power, not toward need.

One way to protect the vulnerable would be to ensure that all parties have a clear voice in deciding what would be good for them. If small-scale corn producers in Mexico had a seat at the negotiating table, they might not have been overrun by the North American Free Trade Agreement.

It is possible to add elements to trade agreements to protect the vulnerable. Rather than relying on the market alone to improve living conditions for the poor, trade agreements could include non-market measures such as social safety nets that protect and improve their living conditions. Those who are confident that the safety nets for the poor will not be needed should have no hesitation about providing them, as a kind of insurance.

Packaging trade proposals together with protective programs of this kind might increase the likelihood that poor communities would support them.

Aloha, George Kent

2. Elena Zhiryaeva, North-West Institute of Management of the Russian academy of state service

I would like to give an example of one arrangement which made food more available from economical point of view for the residents of Russia in the situation of food embargo in 2014. At the request of the Russian authorities Brazil reduced the prices of pork deliveries to Russia. On some commodity positions decrease made up to 50%.

3. Ekaterina Krivonos, FAO, Italy and co-facilitator of the discussion

Dear participants, I would like to welcome you to the discussion: “Examining the linkages between trade and food security: What is your experience?” I hope that we will have a very fruitful and interesting debate. This is not an easy topic, and country experiences with trade in relation to food security objectives vary a lot. But that is precisely why it is important to have the different views heard and use the rich experience in the countries (both positive and negative) to develop viable proposals that governments can take into consideration when designing public policy.

Trade and trade policy affect the four pillars of food security in a very direct way as they affect food availability and the relative prices of goods and factors of production. But trade in itself is neither a threat no a panacea when it comes to food security, but it certainly poses challenges and even risks that need to be considered in a debate, supported by proper analysis.

Food security is high on the political agenda these days, not only at the national level, but also in global processes, such as WTO negotiations, G-20, development of Sustainable Development Goals. The moment is therefore ripe for having this discussion on the implications of trade and trade policy for food security, and I am looking forward to hearing your views. As a facilitator, I will do my best to provide relevant inputs and steer the discussion towards constructive outcomes.

Best,

Ekaterina

4. Susan Bragdon, QUNO, Switzerland and co-facilitator of the discussion

Greetings to everybody, I wanted to add my welcome to my co-facilitator Ekaterina. I feel very lucky that Ekaterina has joined as a facilitator -- though it means you all are now in the hands of an economist and a lawyer!

As Ektaterina points out, the relationship between food security and trade rules is complex. We welcome input from all disciplines and from all stakeholders to help us gain a better understanding of how these two broad areas relate to one another. Given the diversity of situations amongst and within countries we want to hear your experience with how trade rules have helped, challenged, hindered your quest for food security and a sustainable food system.

Let us know if there are particular ways in which we can help facilitate the conversation. In the meantime, we look forward to your contributions and will jump in with our comments and questions as well.

Best,

Susan

5. Dennis Bennett, AfriGrains, Inc, United States of America

1) From your knowledge and experience how have trade agreements and rules affected the four dimensions of food security (availability, access, utilization, stability)?

In our experience, trade agreements and rules have a mixed affect on all four dimensions of food security. Jennifer Clapp's 2014 paper provides an excellent survey of the literature both pro and con regarding cross-border trade agreements vs. free markets

The problem with much of the well-intentioned trade agreements and rules is the unintended consequences on local food production, storage, and markets that most global policy approaches tend to ignore until after the fact.

A better approach to global food security would be to focus more efforts on all aspects of the local food security value chain (see question #3 below), and then determine how national and regional trade agreements and rules can be applied to support the local food security value chain.

2) What is your knowledge and experience with creating coherence between food security measures and trade rules? Can rights-based approaches play a role?

Coherence between food security measures and trade rules is achievable, if the local food security value chain (FSVC) is addressed first. Rights-based approaches can and should play a role, but must first be addressed from the "bottom up" of the local FSVC.

One of the missing elements in the global food security, malnutrition, and trade agreements debate seems to be an understanding of what motivates farmers (including smallholder farmers) to grow a specific quantity and type of food. Farmers are rational producers in our experience, and will not grow more food than they can use themselves, or can profitably sell. Long-term food security depends upon all aspects of the Food Security Value Chain working in harmony. When "blockages"

occur in the FSVC, whether from lack of the right seed (farming), or onerous trade rules that force prices to be too high or too low (markets), food security is diminished.

Similarly, if the participants in all aspects of the FSVC are not treated with dignity and respect, i.e., treated with basic human rights, then the FSVC and food security will be reduced because inefficiencies are introduced into the system. Thus, we would again argue that a "bottom up" approach to the local FSVC, including the rights of all stakeholders for fair pricing, should then lead to a regional and national approach that is more supportive of the FSVC "system".

3) How can a food security strategy, including components that explicitly support small-scale farmers in agro-biodiverse settings, be implemented in ways that might be compatible with a global market-based approach to food security?

At AfriGrains, we believe the "Food Security Value Chain" (FSVC) includes the entire food security "system". This includes: 1) field preparation; 2) farming; 3) storage and handling; 4) transportation; and 5) markets. Without attention to all elements of the Value Chain, and unless they are viewed as a comprehensive "system" (or as a "complex adaptive system"), food security will only be minimally improved. International trade agreements and cross-border rules are only one small aspect of the Food Security Value Chain.

Policy makers should continually ask: "why would a farmer produce more food than they can store, transport and sell at a price that is greater than the cost of production-storage-transportation-sale?" If there is no way for the farmer to adequately store produce after harvest, resulting in post-harvest-losses due to disease, mold, or animal destruction, then the farmer is irrational to grow more food than can be safely stored prior to sale. If the farmer has only a donkey for transport to market, or can only transport food to market on his/her back/head, then there is little incentive to grow more food than can be consumed by the family. If the final price for the food at the market is less than the cost of storage, or cost of transport (even by donkey-back), or cost to produce, then the farmer is likewise irrational to grow more food than that needed to feed his/her family for the next year.

We believe that most farmers are rational, all else being equal. If farmers are rational producers, then they will only produce surplus food to the extent that they can reasonably expect to realize value from their efforts. If that food is expected to be lost during storage, is unlikely to be transported to market at a reasonable cost, or cannot be expected to be sold at a profit after expenses, then the rational farmer will not grow surplus food. Change that equation to correct the storage, transport or market incentives/prices, and the farmer will rationally grow as much grain as he/she is able to ultimately sell.

If our goal is to feed the 800million people who are food insecure today as well as the expected 2 billion more people by 2050, then we need to identify what systemic blockages exist within the FSVC that restrict the profitable production, storage, transportation and sale of food from farm to the consumer. Crossing national borders is only one small element of the entire FSVC. This assessment must be done at all levels: local, regional, national and international.

Historically, we see that it was not until the combination of farm mechanization, storage innovations, transportation improvements, and the creation of markets, that farmers in the Midwest United States transitioned from being subsistence-level farmers to food surplus producers. This transformation occurred in approximately the fifty years between1825-1875 and required all 4 sufficient conditions to be present before the region became food secure. The John Deere steel

plow, the McCormick harvester, the steam-powered grain elevator, the Erie Canal, railroads, the telegraph, and the Chicago Board of Trade futures markets are just some of the changes that contributed to the transformation from subsistence level to food surplus farming over that time frame. It was also during this time frame that the increased production of food enabled the formerly subsistence-level farmers to produce enough surpluses to feed the growing urban populations of New York, Boston, Chicago, etc.

These same challenges face us today in Africa and Asia. Before addressing the trans-national trade agreement questions, we need to ask how x country is to grow enough food to feed its own urban population. Are there blockages within the local FSVC that restrict local farmers from providing the amount of food to the end consumer within the urban centers in their own country? If so, have they been identified, and what solutions are available to remove those blockages? Only after we have addressed the local FSVC issues can we then address the trans-national issues and blockages.

For example, in our experience, farmers in East Africa have the capacity to produce more food than what the family/household needs to feed itself. The growing urban populations are an easy market for local (smallholder) farmers to sell into. The demand is there. However, storage facilities are lacking, transportation systems (roads, railroads, trucks, trains) are not adequate, or not cost-effective, and thus the final price to the consumer is either too high, or locally produced food is simply not available. Until the local storage, transportation, and pricing issues are resolved, local farmers will not increase food production because why should farmers grow something that will spoil in storage, not be transported, or not be sold because the local FSVC system is too inefficient.

If the local FSVC of production, storage, transportation and markets can be more adequately addressed, then local (smallholder) farmers will successfully be able to compete with alternative sources of food. This levels the playing field between farm, storage, transportation, and merchants globally. Sorghum produced in the US is much more efficiently produced than in East Africa. However, capital costs of production are also higher in the US. Storage is more efficient in the US than East Africa. But the cost of transport should be much less from local producers in East Africa to urban centers than the cost of transport from the US. Except that donkey-back is not an efficient means of transport, and cannot provide enough quantity of food to market. Hence, the "blockage" to the local FSVC chain is the inefficiency of transportation, combined with poor (or non-existent) storage facilities. Solve the "donkey-back" transportation issue, and local smallholder farmers will be more than competitive with global, more efficient but very distant (cost of transportation) farmers, in terms of "delivered cost of food".

In conclusion, achieving global food security is possible if policy makers such as FAO and Committee on Food Security change the paradigm, and address the entire FSVC systemically from the "bottom up". Private companies such as AfriGrains can profitably address FSVC in East Africa, through purchasing from local smallholders and its own production, fixing the local storage and transport issues in a way that allows us to compete against the large multi-nationals. The solution is not more trade agreements and rules, but rather investors and companies willing to solve the world's hunger challenge in creative, sustainable, and new ways, with human dignity and respect for all stakeholders.

Dennis Bennett

CEO

AfriGrains, Inc.

6. Abdybek Asanaliev, Kyrgyz National Agrarian University, Kyrgyzstan

[*original received in Russian on the FSN Forum in Europe and Central Asia, http://www.fao.org/fsnforum/eca*]

Trade agreements have definitely affected the four dimensions of food security (FS): availability, access, utilization (nutrition) and stability. This situation is due to the accession of the Kyrgyz Republic to the WTO. This impact on the four dimensions varies. In order to determine microeconomic and macroeconomic aspects of this impact, it is necessary to conduct a special research. Increase in imports of mineral fertilizers, plant protection products, new varieties of seeds and veterinary preparations lead to an increase in crop productivity, i.e. availability. At the same time seed intervention as a result of international agreements (between Kyrgyzstan and the Russian Federation) destroys the current seed market, therefore seeds produced by seed-production farms don't reach the consumer. Contraband and infringing goods (animal breeds, fruit crop plants) from Uzbekistan and Tajikistan are threatening phytosanitary and epizootological situation. As it may favourably affect food availability, it will have an adverse effect on utilization and stability. Due to the accession to the Customs Union, food exports become rigid, since the Customs Union has high technical regulations. Therefore farmers or processors must ensure compliance of their products with ISO 22000 and HACCP. Compliance of their products with these standards allows them to export and to get profit. Growth of profits at microeconomic level may improve availability, access, utilization and stability. The role of the government of the Kyrgyz Republic is to ensure certification of products in accredited laboratories.

7. Ekaterina Krivonos, FAO, Italy and co-facilitator of the discussion

Dear Dennis [*Bennett, previous participant, Ed.*],

thank you very much for such a detailed and thoughtful post. Many excellent points here.

8. Ricardo Sánchez Villagrán, SVyAsoc Trazabilidad, Argentina

[*Original contribution in Spanish*]

- En base a sus conocimientos y experiencia ¿cómo han afectado los acuerdos y normas comerciales a las cuatro dimensiones de la seguridad alimentaria (disponibilidad, acceso, utilización y estabilidad)?

Hola a Todos. Mi trabajo es la Asesoría, Consultoría, Docencia e Investigación en aplicaciones, análisis y desarrollo de Trazabilidad y GeoTrazabilidad, principalmente en Latinoamérica y El Caribe, región de mucha producción alimentaria. Desde hace varios años, Comunidad Europea, USA y Países del Asia Pacífico, han implementado Trazabilidad y se la exigen a los Países que exporten a éstas, inclusive con fechas límites, básicamente en los productos que menciona el Reg 178/02 de CE, no sólo para saber el origen de los Productos, sino como herramienta para controlar la calidad e inocuidad alimentaria. Y con esta base de Normativas, quiero citar el caso de, por ejemplo, el producto mango (Mangifera Índica), donde uno de los lugares del Mundo con mayor calidad, era Haití, y después del terremoto y la lentitud administrativa, hizo que República Dominicana desplazara la provisión de este producto por el simple hecho de contar con Trazabilidad.

- ¿Que conocimientos y experiencia tiene en la creación de coherencia entre las medidas de seguridad alimentaria y las normas comerciales? ¿Pueden los enfoques basados en los derechos desempeñar un papel relevante?

Argentina ha pasado a ser en los últimos años, uno de los principales exportadores de soja en sus diferentes presentaciones: semilla, aceite, pellets, harina, etc, etc, pero ya ha llegado el rumor al mundo de los residuos químicos que iban en estos productos dado el uso indiscriminado de herbicipas, plaguicidas y fungicidas, por lo cual, por ejemplo, el Ejército Chino, alimentado en gran parte con carne porcina y este animal a su vez alimentado con soja argentina, está poniendo en duda en si seguirá comprándole este tipo de productos con tantos químicos a la Argentina, máxime al ser OGMs. Aparte de ello, pesa también las cuestiones Medio Ambientales, ya que la Argentina ha desmontado bosques nativos para seguir plantando soja, lo cual ha llevado a problemas como aluviones, cambios de flora y fauna hasta desarraigo de personas.

- ¿Cómo puede una estrategia de seguridad alimentaria -incluidos los componentes que apoyan explícitamente a los agricultores de pequeña escala en entornos de agrobiodiversidad-, implementarse de forma que pueda ser compatible con un enfoque global para la seguridad alimentaria basado en el mercado?

Con capacitación. Hay empresas grandes y pequeñas se capacitan casi constantemente, pero todos sabemos que entre el 60 y el 70% de la producción alimenticia está a cargo de la Agricultura Familiar, a veces de individuos. Si bien la tarea no es fácil, es posible, máxime las TICs disponibles hoy en día.

[*English translation*]

- From your knowledge and experience how have trade agreements and rules affected the four dimensions of food security (availability, access, utilization, stability)?

Hello everyone. I work as advisor, consultant, lecturer and researcher on applications, analysis and development of traceability and geo-traceability, mainly in Latin America and the Caribbean, a region with high food production. For several years, the European Community, the United States and diverse countries in the Asia and the Pacific region have implemented traceability, establishing it as a requirement for countries exporting them their products, even with sell-by dates, basically for items mentioned in EC Regulation 178/02, not only to know their origin but as a tool to control food quality and safety. On this regulatory basis I would like to mention -as an example- the case of Haiti, producer of world-class mangos (Mangifera indica). Following the earthquake and the administrative unwieldiness, supply was shifted to the Dominican Republic simply because it was traceable.

- What is your knowledge and experience with creating coherence between food security measures and trade rules? Can rights-based approaches play a role?

In recent years, Argentina has become one of the leading soybean exporters in its different forms: seeds, oil, pellets, flour, etc. However, it has already been rumoured that these products contain chemical residues due to the indiscriminate use of herbicides, pesticides and fungicides. This is why, for instance, the Chinese army -with a diet primarily consisting of pork, fed in turn with Argentinean soybean-, is questioning whether to continue buying these products from Argentina, containing so many chemical substances and even considering they are GMOs. In addition,

environmental issues also play an important role, since Argentina has deforested native forests to extend soybean production, causing problems such as floods, changes in flora and fauna and even uprooting of people.

- How can a food security strategy -including components that explicitly support small-scale farmers in agro-biodiverse settings- be implemented in ways that might be compatible with a global market-based approach to food security?

With training. Large and small companies conduct training almost continuously. However, we all know that family farming -sometimes individuals-, yield between 60 and 70% of food production. Although it is not an easy task, it is possible, especially with the assistance of the ICTs available nowadays.

9. Moshfaqur Rahman, Bangladesh

1. From your knowledge and experience how have trade agreements and rules affected the four dimensions of food security (availability, access, utilization, stability)?

a: Rules & agreements are always have an We & They situation. But when disaster happen & people ask for resolution these hardly factual. This moments most of LDCs are giving subsidies to the agriculture. they are getting well return. Now if pongee-schemers try to do their old jobs-I believe they will not be successful.

Availability-yes capital goods are available, also the disaster tools.

Access-the structure is shaping now.

Utilization & stability-they do have problem, but it needs time. After 1990s-the globalization wiped lots. Time must be given to recover.

2. What is your knowledge and experience with creating coherence between food security measures and trade rules? Can rights-based approaches play a role?

a: Might plays-not confirm, because a clever respondent could turn table to own side. This type of skill is absent in LDCs- they might not perform well. FAO- could provide assistance.

Also any disaster happen, there is many organs work on but the recovery or disaster management is not well manage to development curve. Like country A-has north & south. Now south have disaster but north has not. Now development of north will be eaten by these south factors, because the recovery give food but not helping the corps growing & many.

We stop-the right-based approaches could be an option. This could also help the patent free movement. If food & corps patents are on UN hand & claim as the global right for all people! Hope a better world.

3. How can a food security strategy, including components that explicitly support small-scale farmers in agro-biodiverse settings, be implemented in ways that might be compatible with a global market-based approach to food security?

a: I have doubt, because most places we destroy the ecology itself for market based approaches. We must think again.

Because the small entrepreneurs are easy hunt for big farms & natural reasons. The element of social business could be remedy. If few of rich countries & bunch of LDCs just for agro-products make a social business among them if it's successful then other can come. May be the factors of global markets can be useable.

FAO- can be a leader with other UN entities. UNCTAD have experience in market, the social business can be better tested with their diagram.

Rich country could be Scandinavian countries could lead with a bunch of LDCs, the LDCs also operate agro-product among them in social business module.

LDCs are not coping with the cost, this is a potential move for FAO.

10. Ghose Bishwajit, China

Buenos dias,

The issues surrounding trade policies in the context of food security are indeed very topical, and their linkages so controversial. Here is a summary of what I see:

Q1) The degree to which TP influences the elements of FS depends greatly on various geopolitical parameters. And why not within a given country,

what was said about compartmentalization of interest.

TP can have significant impacts on national level FS for examples in the case of the Gulf countries where the degree of dependence on international market is relatively too high. This scenario can be different in countries with some degree of self-sufficiency. However, in countries, especially in the poverty ridden neighbourhoods, food-trade saw no to little success in its fight against hunger.

Q2) The concept of trade to reduce hunger itself is an oxymoron, as it in many cases, if not most, runs counter to basic human values like right to access to

healthy food and environment. A right-based approach to food and health is therefore what it appears to be most crucial and appropriate.

Better TP indeed hold promises to magnify the potential for availability, but what about accessibility, and quality. Cheap foreign dumping is a double-edged sword, it destroys local farming communities and makes way for convenience foods, ruining both peoples health and livelihood. In my view, food trade laws must be

brought under scrutiny, firstly, to make sure that food is bound for a place where is needed, and the transaction not merely serves the masters of trade, but

peoples' right to food; and secondly, to regulate the type of food being traded, boats should load REAL foods, not just sacks of calories.

Q3) Again, an oxymoron, achieving food security in a market-based economy is an unprofitable uncapitalistic projekt. It certainly sounds pessimistic to the prophets of free-trade, lets advance by 2 simplest questions instead: why patenting paddy seeds if feeding people rice is really the goal? Instead/beside food, why not ease policies for technology transfer/trade?

There are no straight answers to these questions, perhaps they shoudnt be asked at all! This situation has already become so complex, there is no going back from here, what is needed here is but a fundamental change in the very concept of trade, and a rather human version of trade, little more word-ly and little less capital-ly.

A mammoth task as it is, leading suprastate bodies like UN, Worldbank must take the lead, and at the same time take firm stance against the lethal patents for life forms, or at least the agri-related ones.

A food sovereignty approach can be instrumental to fix these sort of anomalies including the land and resource rights of small-scale farmers. This idea is no longer an infant, and is rapidly expanding, what it needs is growing support by mainstream agripolicy makers e.g. FAO, IFPRI.

Hope my answers could be of help.

Cheers)))

11. Said Zarouali, Haut Commissariat au Plan, Morocco

Les pays riches peuvent résoudre leurs besoins alimentaires à travers le recours aux accords de libre échange avec des pays caractérisés par l'abondance des ressources naturelles notamment l'eau et les sols fertiles. Dans ce sens l'acquisition des terrains agricoles dans les pays pauvres par des pays riches devient un modèle de coopération nord sud basé sur le transfert de savoir faire et la contribution au développement du pays hôtes. Les pays hôtes constituent une source d'approvisionnements des produits alimentaires. Cependant, la réussite de ce type de coopération entre les pays en voie de développement dépend du degré de leur intégration bilatérale.

En général, dans les accords de coopération entre les pays Nord Sud, la sécurité alimentaire ne constitue pas priorité ou une vraie préoccupation des décideurs. Elle vient en troisième rang après tout ce qui est Economique.

La sécurité alimentaire doit être une composante stratégique des accords de coopération en incluant des mesures et des composantes préservent les acquits des petits agriculteurs (agriculture familiale) et bien définir les conditions d'importer et d'exporter les produits alimentaires de base en, particulier les céréales.

Les accords de coopérations peuvent améliorer à court terme la disponibilité des produits alimentaires, mais la stabilité des marchés des produits est un défi pour les pays importateurs.

A long terme les accords de coopération ne peuvent pas répondre à toutes les dimensions de la sécurité alimentaire.

12. Byomkesh Talukder, Wilfrid Laurier University, Canada

I think both export and import of food from a country will have to be considered to understand the linkage the trade and food security because both have the impacts on the aspects of food security.

A country import food to ensure food availability. On the other hand a country exports food to earn foreign currency which may use to buy food also.

13. Boussard Jean-Marc, Académie d'Agriculture de France, France

From your knowledge and experience how have trade agreements and rules affected the four dimensions of food security (availability, access, utilization, stability)?

If markets were functioning properly, as they are supposed to do in elementary textbooks, then, trade would be extremely beneficial for food security : By selecting the techniques corresponding to the lowest cost, markets would minimize the difficulty of ensuring access to food, even for the poor. And by pooling statistically independent risks, they would stabilize prices in a golden long run equilibrium…

Unfortunately, actual markets do not work like that. The major reason is that producers do not know much about the long run equilibrium prices. They are mistaken, sometime over optimistic, and producing more than necessary, and sometime unduly pessimistic and producing less than it would have been desirable. Then, with a relatively rigid demand, large price fluctuations follow. The latter's are very detrimental, creating a feeling of insecurity, which results in less investments, and less production than would be necessary for securing "access" to food. I don't speak of "stability" (obviously reduced by price fluctuations) nor of "access" (dramatically reduced during the phases of penury, but also during gluts, whence workers are going to be fired out of bankrupt firms). Regarding utilization, I don't know, although I suspect that large price fluctuations are not and ideal way of optimising this aspect.

Another major market shortcoming had been noticed by Thomas Robert Malthus more than 200 years ago : with a permanent oversupply of poor workers, in a perfectly free market, the productivity of labour is likely to fall below the value of the minimal food requirement, thus forcing some workers to die (and the sooner the better for alleviating suffering) until labour be scarce enough to raise its price. If one is not satisfied with such an outcome (this is my situation) , it is better to forget about extreme liberalism…

What is your knowledge and experience with creating coherence between food security measures and trade rules? Can rights-based approaches play a role?

In order to remedy the above mentioned drawbacks, it is perfectly impossible to devise a national policy without staying in contradiction with the current WTO rules, because any such intervention will be "distorting". The only feasible policy in this respect would be international, applied everywhere to anybody. It would also contradict the liberal doxa , to some extent involving international authorities into the economy.

If an international strategy is not possible, then, national ones might be possible, under the condition that departures from the WTO rules be allowed….

How can a food security strategy, including components that explicitly support small-scale farmers in agro-biodiverse settings, be implemented in ways that might be compatible with a global market-based approach to food security?

It is simply not possible.

14. Vijay Yadav Tokala, Department of Horticulture, India

Trade Liberalization and Food Security:

The present trade agreements are mostly commercial driven and 4 dimensions of the food security is scarcely reached. Most of the trade agreements are between self sufficient nations leaving behind the needy nations with scarce resources. International Policies should concentrate all the nations and ensure appropriate distribution of the produce.

As mentioned in the references cited, agriculture constitute very less percent of the nation's export and very few portion of agriculture produce cross borders in the world. Trade Liberalization would help in ensuring food security in all the parts of globe yet several factors need to be considered while liberalization. Liberalization of Trade policies and ensuring Food Security involves several issues interlinked with them. Some of them are:

Moral Imperative: Very complicated one to achieve, but every nation should develop a moral imperative to distribute the excess agricultural produce to the nations with grave need for it.

Food Safety: Food safety standards vary with nation to nation. Hence liberalization should be made after designing common food safety standards for nations in the world. This activity would ensure hassle free food trade among different world nations.

Crop Diversity: There exists danger of loss of crop diversity by simplifying international trade policies, as the farmers would tend to grow only the crops which possess international demand in order to gain profits. Hence trade policy liberalization should be concentrated on different crops.

Subsidies: Allowing agricultural subsidies would encourage even small scale farmers, belonging to areas favorable for agriculture, for production of quality produce, which can be further traded after keeping suitable buffer in the nation.

Food Loss/Food Wastage: Ensuring reduction in food loss and food wastage globally, would in turn increase availability of food and the excess of produce may be exported to needy.

Needy Countries: Liberalization policies should be designed in such a way to facilitate needy countries and not in way to profit developed countries. There should be phase wise liberalization involving needy countries first then the other nations.

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Vijay Yadav. T

INDIA

15. Sally Bamurrah, AlMasar Center, Yemen

[Received through LinkedIn]

Such topic cannot be answered away from the multinational differences of the combination of food security and trade . This is due to the fact that some countries' food security policies are different from other countries. In other words, trade & food security have different set ups in different countries. The small farmer, for example, is always in bad terms with any type of trade except that

type of modest trade in the small local market. But the middle income farmers, are in a better position with trade of their products within their national economies. In some countries they enjoy some protection or some price subsidies. In some occasions, farmers sell their products to cooperatives which in turn sell those products to big traders by special terms such as traders help in some inputs, trainings or else depending on cost - benefit exchanges.

Some countries, however, perform agriculture trades in big quantities to other countries return of some big projects or enterprises. For instance, Sudan gives agriculture products to Gulf states in return of provision of some infrastructures.

This topic needs a lot of discussions and I hope we receive more contributions.

Sally Bamurrah

16. Claudio Schuftan, PHM, Viet Nam

The political and economic context within which national planning takes place is strongly shaped by economic globalisation and the increasing power of transnational corporations.

There is therefore a need to clearly **articulate the dire dangers to food security and food sovereignty in current trade and investment agreements** and to point towards the provisions which should be included in such agreements to guarantee food security and food sovereignty of the most needy. In recommendations 17 & 18 of ICN2' Framework for Action **there is no reference, under monitoring and accountability, to trade and investment agreements**.

The People's Health Movement (PHM) is urging WHO, FAO, the UNHCHR and UNCTAD to create a commission to report on the implications of trade and investment agreements for the right to nutrition in accordance with para 25 of UNGA resolution A/RES/68/177

17. Valeria Furmanova, Department of agricultural development, Ukraine

[original received in Russian on the FSN Forum in Europe and Central Asia]

It may definitely be noted that trade agreements and rules have affected the four dimensions of food security: availability, access, utilization, and stability.

Let me make an actual example. Ukraine has been successfully developing the European poultry meat market. So far, within the quota, annual exports have increased by 25 percent. Ukrainian poultry meat producers are planning to increase exports. On their part it requires investments in quality system development in accordance with agreements. In return it affects the final retail price of poultry meat for consumers in Ukraine. Over a period of 6 months the price of poultry meat has increased by 40 percent at the domestic retail market.

Poultry meat has always been an affordable food for people in Ukraine. Precisely due to its affordable price it accounted for 48.8 percent within the meat consumption pattern in 2013. Currently there is a decrease in consumer demand for meat in general, and for poultry meat in particular. Nowadays the population of Ukraine prefers cheaper varieties of fish and offal.

Therefore, there is every reason to state the decrease in two dimensions: AVAILABILITY and STABILITY.

18. Christian Häberli, World Trade Institute, Switzerland

Farmer Security is not Food Security!

Food Security and Trade? A complex subject, agreed. Sadly, this debate shows that most opinions are already made. But the good news, from an academic vantage point, is that while the spectrum of opinions still varies widely, the subject is by now well-researched. A still increasing number of publications address the political, economic and regulatory dimensions at the national and the international levels of the Right to Food and of agricultural production and trade. Unlike, for instance, food security vs (foreign) investment (including, respectively, home and host state responsibilities. Somewhat surprisingly, another under-researched topic is the food security dimension of agricultural production and of border protection policies. Both free traders and "food sovereignty" advocates are quick in their (opposite) assessment of the impact of trade liberalisation on food security. Both, however, seem to overlook the fact that these policies in every country rely on domestic farm promotion and protection tools. Never mind consumer security. Or the collateral damage which such policies might have on efficient farmers in other countries – arguably even those public goods support policies notified under the WTO Green Box with little or no distortions on trade and production. My other regret is that FAO and other intergovernmental organisations have defined food security but are unable to agree on Best Farming Practices to reach that goal.

Farmer security agreed to by taxpayers and domestic consumers is fine as long as it does not come at the expense of other countries – but it does not guarantee global food security and feed a world population of 10 billion people, including those who only earn a few dollars a day.

19. A Ercelan, Pakistan Fisherfolk Forum, Pakistan

We submit some reflections from our experience of over two decades of work with fisher folk in Pakistan, and from experiences shared by social movements specially in South Asia.

We find trade as an obstacle to promoting the lives of subsistence and small fishers. Yes, export prices have steadily increased and so has volume of exports. But there is growing inequity within the community and between fishers and traders, processors and exporters.

This inequity has resulted in an unacceptable situation where fishers cannot afford to eat their own catch of highly nutritious varieties. An absurd result is that e.g. Vietnam exports tens of millions of dollars of cheaper, tasteless fish and then buys premium marine species.

Fisher folk are now increasingly dependent upon industrial, chemically laden poultry to stave off hunger. Such poultry is 'cheap' because of various subsidies. These subsidies include fishmeal prepared with 'trash fish' caught largely by large, commercial trawlers. The implications for ecology as overfishing are ominous.

Trade is supposed to make life cheaper. We don't see that happening at all.

State policy encourages food exports such as wheat, rice and sugarcane. It also encourages imports to stabilise prices between harvests. Both sorts of trade make lots of money for exporters, but domestic prices do not fall by imports and obviously do increase by exports that are subsidised from public funds.

Some allude to fuel imports as the necessity to export whatever can be exported. But who do increasing fuel imports benefit? Fisher folk are forever complaining about fuel prices and prices of commodities produced via fuel-dependent processes.

Our issues may be generalised to small farmers, specially the landless.

We believe that a genuine food security policy will be one of food sovereignty. Until all have adequate assets to allow them to choose trade as beneficial, the policy must ban food exports and discourage other exports that endanger the ecology of water and land such as textile products. Enormous acreage is devoted to growing cotton, which displaces the production of nutritious food items.

In a country that has mass poverty and resulting mass hunger and malnutrition, any trade in food products is lethal for universal social protection.

External websites carry articles that elaborate our position. These include http://asiapacific.anu.edu.au/blogs/southasiamasala?s=ercelan&searchbutton=go

20. Marie Cuq, Nanterre University (Paris Ouest Nanterre La Défense), France, France

[*Original contribution in French*]

Dear all,

Libéralisation du commerce / aide et assistance alimentaire

Traditionnellement, les Etats octroient volontiers leur aide par le biais d'un écoulement des excédents alimentaires qu'ils produisent, profitant de cette opportunité pour éviter de faire chuter les prix de ces denrées par une offre surabondante sur le marché mondial. Cette pratique rend la fourniture d'aide irrégulière et parfois inadéquate puisque non définie par les besoins des populations et des Etats bénéficiaires.

Pour faciliter son adéquation et sa prévisibilité mondiale, plusieurs Etats ont, dès 1967, adopté une Convention relative à l'aide alimentaire par laquelle ils s'engageaient à fournir une quantité annuelle minimum d'aide internationale . Sa mise en oeuvre fut cependant régulièrement axée sur la recherche de nouveaux débouchés pour l'écoulement des stocks alimentaires des Etats fournisseurs d'aide et ne prenait pas assez en compte les besoins des populations bénéficiaires. Elle peinait également à minimiser les effets pernicieux de l'aide sur les politiques agricoles des Etats bénéficiaires. Du fait de la succession de crises alimentaires dans les années 2000, il devenait urgent d'améliorer les modalités de l'aide et de porter une attention plus grande aux besoins en développement des Etats bénéficiaires. En 2012, les Etats adoptèrent la Convention relative à l'assistance alimentaire pour cela en portant une attention spécifique aux besoins nutritionnels des populations et aux besoins en assistance des Etats bénéficiaires.

Mais, la Convention de 2012 limite elle-même la portée de ses dispositions en exigeant leur compatibilité avec le droit de l'OMC, en particulier avec les futurs aboutissements des négociations commerciales agricoles. Dans ce cadre, seule l'aide alimentaire d'urgence répondant à certaines conditions serait considérée comme compatible avec le droit de l'OMC, ce qui réduirait considérablement les efforts soutenus par la Convention de 2012 s'agissant d'une assistance alimentaire des Etats bénéficiaires pour une amélioration durable de leur sécurité alimentaire nationale.

Marie Cuq

PhD Candidate / Doctorante - L'alimentation en droit international (Université Paris Ouest). Consultante - Droit à l'alimentation, réformes agraires et foncières.

http://www.fao.org/fsnforum/sites/default/files/resources/M.Cuq-ConventionAssistanceAlimentaire2014_0.pdf

[*English translation*]

Dear all,

Freedom of trade/aid and food assistance

Traditionally, countries willingly provide their aid by channeling their surplus food production, taking advantage of this opportunity to avoid driving down the prices of these commodities by an overabundant supply on the world market. This practice makes the provision of aid irregular and sometimes inadequate as it is not defined by the needs of the population or the beneficiary countries.

To facilitate its worldwide balance and predictability, since 1967 many countries have adopted a convention related to food aid by which they commit themselves to provide a minimum annual quantity of international aid. Its implementation was however normally based on research for new outlets for the flow of food stocks of the aid providing countries and did not sufficiently take into account the needs of the beneficiary populations. It also endeavored to minimize the pernicious effects of aid on the agricultural policies of the recipient countries. Arising from the successive food crises in the years 2000, there was an urgent need to improve the methods of aid distribution and to give more attention to the development needs of the recipient countries. In 2012, for this reason the countries approved the Convention related to food assistance putting special emphasis on the nutritional needs of the populations and on the needs for assistance of the recipient countries.

However, the 2012 Convention limits the application of its provisions by demanding their compatibility with the rights stated by the WTO, especially with the future impacts of commercial agricultural negotiations. In this setting, only urgent food aid that complies with certain conditions would be considered as compatible with the rights of the WTO, which would considerably reduce the efforts based on the 2012 Convention as far as food assistance to the recipient countries, aiming at a lasting improvement in their national food security is concerned.

Marie Cuq

PhD Candidate / Doctorante - L'alimentation en droit international (Université Paris Ouest) [Candidate to PhD, Food in international law, Paris West University]. Consultante - Droit à l'alimentation, réformes agraires et foncières. [Consultant - Right to food, land and property reforms].

21. Susan Bragdon, QUNO, Switzerland and co-facilitator of the discussion

Dear Contributors,

Thank you for the thoughtful contributions to this dialogue. With a couple of exceptions, it seems that most of the contributors are sceptical that a food security strategy, including components that explicitly support small-scale farmers in agro-biodiverse settings, can be made compatible with a global market-based approach to food security (Question 3 of the Topic Note.)

One contributor indicated there is a danger of crop diversity loss if farmers grow crops that are in international demand in order to gain profits. Another contributor described a food security strategy as described in question 3 and trade rule compatibility as an "oxymoron." Another answered the question by stating "It is simply not possible."

I am wondering if we can dig a bit deeper with some of the suggestions for how a food security strategy that supports small-scale farmers in agro-biodiverse systems can be made compatible with a global market-based approach to food security.

Dr. Claudio Schuftan suggested the need for research that "points towards the provisions that should be included in [trade and investment] agreements to guarantee food security and food sovereignty."

The question is, what would these provisions need to look like? How in particular would the biologically diverse systems piece be supported and still be compatible with global market based approach?

Dennis Bennett notes that what is often missing from the trade/food security debates is an understanding of what motivates farmers, including small-scale farmers, to grow specific quantities and types of food.

Can we explore this a bit more? Mr. Bennett seems to be focusing on producing a surplus that can then be traded. He stressed the need to work bottom-up, starting by looking at the local Food Security Value Chain (FSVC), and treating all actors along the value chain with dignity and respect, valuing human rights.

A few of questions arise from Mr. Bennett's thoughtful presentation.

How can the FSVC approach address what is grown from a bottom-up perspective (rather than a market demand perspective)?

How is what is grown determined so that diversity, including dietary diversity, is encouraged and how does this approach ensure that food gets to the hungriest regions?

How does the FSVC approach encourage the continuous process of developing and maintaining agriculturally biodiverse systems (one of the components mentioned in question 3)?

Mr. Bennett's mentions the example of the transformation of agriculture in the mid-west of the United States from 1825-75. Changes that contributed to the transformation from subsistence to food surplus farming included things like the John Deere plow, the McCormick harvester, the steam-powered grain elevator, the Erie Canal amongst others. But this transformation also led to a huge decrease in the diversity of what is grown in this same area.

The market-based, traded system created in the US is also resource intensive with negative environmental externalities beyond the loss of biological diversity.

Can one use the FSVC approach and support small-scale farmers in agro-biodiverse systems? How is specifically does it do this?

I look forward to our continuing dialogue.

Susan

22. Moises David Rojas Peña, Ministerio de Industria y Comercio, Dominican Republic

[*Original contribution in Spanish*]

Sre. CFS. HILPE

Reciban un sincero saludo de mi parte, a la vez permitanme presentarle un breve comentario con respecto al tema; Examen de los vinculos entre comercio y seguridad alimentaria ¿Cual ha sido su experiencia?.

A finales de las decadas de los 90 en nuestro pais se presento un devate sobre los posibles efecto del Libre Comercio a la economia nacional especialmente a la agricultura y al sector inductrial, la reduccion de aranceles en escala descendente hasta llegar a tasa cero para el año 2005.

Luego de descadas de aislamiento en materia comercial, actualmente nuestro pais a firmado acuerdos comerciales con Centro America, EEUU. y EUROPA, estos acuerdo en sierta forma no son perjudiales, porque han permitido que la poblacion reciba productos de buena calidad y a buen precio, y que nuestro productos tenga cierta fasilidad para ingresar en estos mercados, pero donde esta el problema es en que con las normas ISO, Las MSF, Los OTC, y las medidas no arrancelarias, han creado una carga sumamente pesada para los pequeños y medianos agricultores y en cierta forma a la agricultura familiar ya que estos no cuenta con recursos y estrategia para cumplir con las exisgencias de los mercados internacioanles.

Ha todo esto los altos costo de los insumos agricolas para la siembra, la poca o ninguna asesoria para la mejorar la calidad de los productos, poca logistica para la colocacion de sus productos en el mercado y la inclemencia desvatadora de clima presentan un panorama dificil pero no imposible de superar.

Las naciones desarrolladas son las que mas aplican MSF y OTC asi como medidas no arrancelarias para la introduccion de productos agricolas y alimeticios en sus fronteras, estay totalmente de acuerdo ya nos permiten mejor nuestros productos y les agrega valor. Mi propuesta es que desarrollemos un programa para mejorar las condiciones de nuestro pequeños y medianos

productores prestandoles asistencia tecnica, financiamiento, logistica desde la cosecha en la finca, seleccionando los mejores productos y embalarlo para colocarlo en los mercados nacionales e internacionales y garantizar la alimentacion y la nutricion del mundo.

Muchas gracias, Dios les Bendigas.

Moises David Rojas

[*English translation*]

Dear CFS/HLPE members,

I am pleased to send you my best regards and share a brief comment on the topic "Examining the linkages between trade and food security: What is your experience?"

In the late 90s a discussion on the potential effects of free trade in the national economy, particularly in the agricultural and industrial sectors, arouse in our country. Tariffs were progressively reduced until its eradication in 2005.

After decades of commercial isolation, our country has currently signed trade agreements with Central America, the USA and Europe. These agreements are somehow not detrimental, as they have allowed bringing good products in terms of quality at good price and facilitating the introduction of our products in these markets. The problem is that ISO standards, SPS, TBT and non-tariff barrier measures have generated an extremely heavy burden for small and medium farmers and, somehow, for family farming, because all of them lack the necessary resources and strategies to meet the demands of international markets.

Moreover, the high costs of agricultural seeding inputs, the insufficient or inexistent advice for improving the quality of the products, the inadequate logistics for placing the products on the market and the devastating bad weather outline a difficult, but surmountable scenario.

SPS and TBT as well as non-tariff barrier measures are majorly implemented by developed countries to regulate the introduction of agricultural and food products across its borders.

I absolutely agree with this approach as it allows improving and adding value to our products. My proposal consists in developing a program to improve the conditions of our small and medium producers by providing technical, financial and logistical assistance from the farm throughout to the consumer, selecting and packing the best products to place them on the national and international markets and ensure global food and nutrition.

Thank you very much. God bless you all.

Moisés David Rojas

23. Manuel Castrillo, Proyecto Camino Verde, Costa Rica

[*Original contribution in Spanish*]

Hablar sobre tema tan complejo, redunda muchas veces en caer en más de lo mismo. Sin embargo, las negocicaciones entre bloques siguen manteniendo privilegios a sectores agrícolas con subsidios que deforman el marco de apertura de muchos tratados de libre comercio e incluso son

contradictorios con las políticas regionales para los pequeños bioagricultores y procesos que buscan la sustentabilidad. Seguimos careciendo de fuentes de financiamiento liviano para grupos de riesgo o vulnerables y las normas para certificación orgánica siguen siendo onerosas. La promoción de tierras para monocultivos no va en consonancia con las necesidades nutricionales que se pueden dar con la diversificación, equidad y distribución de pequeños territorios, dando imulso a la agrícultura familiar y comunal, y extendiendo la cadena de valor económico en todos los países, sobre todo los en vías de desarrollo.

Las estructuras logísticas adecuadas, no existen en muchos países, se carece de tecnologías que maximicen los recursos y se pierde la oportunidad de generar mayor valor agregado en el proceso. En muchos sitios el derecho u oportunidad de uso de tierra no está asegurado, incluyendo la situación desfavorable para las mujeres y los jóvenes. El derecho posesorio o cuando menos para usufructuar una parcela daría condiciones favorables de una manera más integral y lograría una equidad más justa. La Gobernanza es factor político vital, pues sin bases de entendimiento y consensos básicos no se logra desarrollo.

Los mercados locales pueden establecer corporaciones y complementar la diversidad para crear ofertas variadas y de volumen, conciliando así, la importancia nutricional para diferentes mercados. Por último, la integración con metodologías de conservación y de manejos de " agrobioconservación " puede establecer puentes para futuros usos aún insospechados que posee la naturaleza y nos ayudarán en el futuro a solventar carencias alimentarias, sea por extinción de especies o eventos producto del Cambio Climático.

Agricultural innovation to protect the environment

http://www.fao.org/fsnforum/sites/default/files/resources/Agricultural%20innovation%20to%20protect%20the%20environment.pdf

[*English translation*]

Addressing such a complex topic often leads to hackneyed ideas. However, negotiations between clusters still keep the privileges for the agricultural sector in form of subsidies that distort the launch of many free trade agreements and even contradict regional policies for small bio-farmers and processes seeking sustainability. We continue to lack soft funding sources for risk or vulnerable groups and standards for organic certification are still onerous. The promotion of land for monoculture is not in accordance with the nutritional needs that might arise from the diversification, equity and distribution of small territories, giving momentum to family and communal agriculture, and expanding the economic value chain throughout the world, particularly in developing countries.

Many countries do not have suitable logistical structures, there is a lack of technologies capable of maximizing resources and the opportunity to generate higher added value in the process is lost. In many places the right or opportunity to use the land is not guaranteed, thus impairing women and youth. The land ownership right or, at least, the usufruct entitlement, would generate favourable conditions on a more comprehensive basis and achieve a fairer equity. Governance is an essential political factor, as development cannot be achieved without understanding and basic consensus.

Local markets can establish corporations and complement the diversity to offer varied and high volume products, reconciling therefore the nutritional importance for different markets. Finally,

integration with "agro-bio-conservation" management and conservation methodologies can build bridges for upcoming -yet unsuspected- nature uses, and will help us in the future to address food shortages, either due to the extinction of species or to climate change events.

24. Claudio Schuftan, PHM, Viet Nam

1. In a free-market world economy, Third World countries are not being given the benefits they and their economies need, but rather what-ideologically-motivated-Northern-trade-partners believe they should give them. Conversely, in the local economy, only those who have something to sell -- and are not hindered in selling it (!)-- can earn anything from trade.

2. So, when trade rules threaten the right to food of the poor, those trade rules should be challenged on the basis of existing Human Rights Covenants. Therefore, states, independent human rights commissions and/or NGOs should undertake 'human rights (HR) impact assessments' of the trade rules the respective country abides by, both during the process of trade negotiations and after negotiations; such an assessment must be public and participatory so as to safeguard people's and communities' rights from the avariciousness of commercial interests and patent rights. (AIFO)

3. For the developed countries of the North, free trade means shaping states' policies worldwide so as to create the environments-most-favorable-to-the-opening-up-of-the-countries-of-the-South-to-globalized-free-markets! It means forcing the hand of these countries to adopt neo-liberal economic policies. The aim here is not really to foster greater democratic participation, but rather state-sponsored market deregulation.

4. This being the case, one can justifiably ask: When creating such 'favorable' market environments, has neo-liberalism been able to manage the crisis of the world food system? And the answer has to be a resounding NO. This latest stage of Capitalism has actually not yet shown it can curb the growth of impoverishment in large segments of both the Third and the First World. This fact leads committed HR workers to a very clear path of where the priorities lie. The crude reality of our times has simply led to levels of inequality beyond tolerance.

5. If the context and the framework of our development discourse are wrong, discussions and actions based on the wrong analyses will be like pouring water into a broken vessel; no amount of effort to fill it will be sufficient.

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HUMAN RIGHTS AND THE WORLD TRADE ORGANIZATION.

Oblivious to the teachings of history, international free trade is being promoted to the rank of 'development motor' as if development would be the same as preparing the population for the market economy. (CETIM)

1. The WTO is driven by a mercantilist philosophy; the focus of what it does is not on the welfare or growth prospects of members. Small, poor countries have little to offer and to gain in the mercantilist WTO exchange. The multilateral-trade-liberalization-drive championed by the WTO has been mainly driven by corporate interests seeking access to foreign markets; the WTO, therefore, is a good vehicle for advancing their interests.

2. It is not that industrial countries need the WTO; their firms can and do obtain access to new markets directly. In fact, the private sector has often concluded that the multilateral system may be good, but is ineffective, so, they use non-governmental routes.

3. On the other hand, it has been estimated that, if all (that is ALL) global trade barriers for the poor countries were eliminated, approximately 500 million people could be lifted out of hunger and poverty over 15 years. (Keep in mind that, if China is excluded, the number of hungry people has actually increased in the last decade. This, despite the right to food being enshrined in Article 25 of the Universal Declaration of Human Rights of 1948 and in the World Food Conference of 1974.

4. As a Human Rights challenge, it is, consequently, more important to advocate for raising income of poor persons than for food self-sufficiency, i.e., raising rural incomes is more important than increasing food production. So, the right to fair social and economic conditions is necessary to allow people to feed themselves (FAO).

6. In addition, and as related, keep in mind that if the debt burden of poor countries were significantly reduced or eliminated as their terms of trade were made fairer, the amount of aid required would also significantly diminish.

7. The worst enemy of developing counties is neoliberalism which means the complete elimination of protectionism. We cannot thus say that if 'All global trade barriers to poor countries are eliminated, 500 million or more people could be lifted out of hunger'. It is an illusion to think that the problems of underdevelopment are due to trade barriers. Poor countries need protectionism as the air they breathe and, in the developed countries, the ones who suffer most from free trade are the unskilled working classes. The roots of poverty and exploitation are based on the power relations in that country, rather than on world trade.

8. Samir Amin (1985, Delinking: towards a polycentric world. London, Zed Books) has elaborated very clearly the importance of national protection and cultivating South South trading blocks protected from rich world competition. The logic of comparative advantage applies where two countries are at comparable levels of development. Free trade between rich and poor is much more likely to exacerbate the inequalities.

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FREE TRADE AGREEMENTS, MILLENNIUM DEVELOPMENT GOALS, AND HUMAN RIGHTS: WORKING AT CROSS-PURPOSES?

Who will live and who will die has already been decided by the economic structures brought about by globalization (P. John)

1. These days, bilateral free trade agreements (FTAs) are totally bypassing the World Trade Organization (WTO). This is because rich countries think that multilateralism is for weak players and is based on long-winded processes with decisions that are typically based on the lowest common denominator arrived at with a one-country-one-vote system. So these rich countries (or the EU) seek their own way through these (often imposed) bilateral FTAs that bypass the WTO. Therefore, WTO critics are, in a way, partly misled when they demonstrate (only) against the WTO in the streets.

2. But, as experience has shown, in FTAs the cost:deception ratio has been high. FTAs pursued by hegemonic powers, despite being nefarious, find developing countries to be complacent, "behaving like animals being blissfully led to their slaughter". (J. Bhagwati).

3. We cannot overlook the proven fact that trade (as much as foreign aid) is not even an opportunity and certainly not a guarantee. This is true, not only from an economic development perspective, but particularly from the perspective of human rights (HR). (G. Kent) Unfortunately, in the case of aid, if one aid program misses its opportunity to deliver what it promised (whatever its expected impact was supposed to be), the next one is as sure to come along as day follows night; unhealthy donor competition ensures that. This is dramatically seen in current-day aid directed at 'helping' poor countries achieve the MDGs.

4. Few people know the MDGs actually comprise only two (of 30!) paragraphs of the full Millennium Declaration --which calls very strongly for democracy and human rights as the route to achieving the stated millennium goals! Actually, despite the fact that paragraphs 25 and 26 of the Millennium Declaration specifically call to apply a HR-based approach, the ongoing Millennium-Development-Goals-drive has become a global action program without such an orientation.

5. Paradoxically, the negotiation of FTAs assumes capacity and political determination at the national level… when the problems we are trying to solve occur precisely because of shortfalls in technical and political capacity at the national level. [It is not, as so often touted, a lack of political will; most of the cases, it is a deliberate political laissez-faire decision of the national leadership in power].

9. As can be seen, much needs to change for trade, aid and the setting of development goals to work synergistically with HR goals. We all need to contribute our own share to progressively make this a reality.

Note: Not being facetious, if we provide sandwiches for all who are hungry in the world on the first day of 2015, will we have fulfilled the MDG of ending hunger by 2015? (G. Kent)

Claudio Schuftan, PHM, Ho Chi Minh City

25. Ann Steensland, Global Harvest Initiative, United States of America

Global Harvest Initiative (GHI) and the **Inter-American Institute for Cooperation in Agriculture (IICA)** welcome this opportunity to participate in this critical conversation about the linkages between trade and food security.

We present the following case study, which appeared in GHI's 2013 Global Agricultural Productivity Report®, as well as some policy recommendations for unlocking the power of trade to deliver development and food security benefits.

Training and Technical Cooperation in the Americas for Better Agribusiness, Markets, and Trade

The Latin America and Caribbean (LAC) region holds vast potential to provide food and agriculture products to meet the demands of a growing world. According to the GHI's 2014 Global Agricultural Productivity Report®, if the LAC region maintains their current rate of Total Factor Productivity

growth, by 2030 they will be able to meet 116% of regional demand. Trading this agricultural surplus will solidify LAC as the next *global breadbasket*.

In order to harness the potential of trade and ensure that small and medium scale producers benefit from it, **IICA provides training and technical cooperation among its 34 member states**, resulting in better policies, institutional frameworks, and capabilities to improve and facilitate market and trade development. *(*GHI has identified key policies that create an enabling environment for trade, agricultural development and food security. See below.)*

IICA also helps improve export capabilities of small and medium scale producers. Using a Canadian methodology called "Export Platforms," IICA strengthened the capacities of some 400 small and medium enterprises from Central America to export agricultural products in high demand in North America.

In collaboration with USDA, IICA consolidated the Market Information of the Americas (MIOA) that facilitates the timely and consistent exchange of market information on agricultural commodities and products among its member countries. Senior officials are trained to collect, analyze and disseminate market information, and improve their services. In Costa Rica, for example, officials are using the knowledge acquired through MIOA to assist producers by collecting price information at the farm-gate and consumer levels, developing and distributing national and international price surveys, processing production estimates and forecasts, and providing information and domestic and international market news for products of interest to Costa Rican producers. Price information is now available via mobile phones so that more than 900 farmers can access information using short term messages.

This case study is a reminder that trade is not a "zero-sum game", in which small producers are the inevitable "losers" and large producers "win" at their expense. Market and trade strengthening interventions, such as those encouraged by IICA, can help maximize the food security and development benefits of trade for producers of all scales.

**Delivering food security and development through international trade relies on an enabling policy environment that emphasizes:*

- *Consistent, transparent, and science-based frameworks for regulating food safety, along with reliable processes for administering sanitary and phytosanitary (SPS) rules;*
- *Legal and regulatory issues play a significant role at all stages in value chain development – including inputs, production, processing, transport, and end markets;*
- *A focus on services including laws and regulations that can support open systems for transport and distribution services; financial services; and wholesale, retail, franchising, and other services;*
- *Regional integration and harmonization of trade laws and regulations, with a particular focus on how laws and regulations are being implemented; and*
- *Adequate and equitable intellectual rights protection is becoming increasingly important as technology, information sharing, and communication play an even larger role in value chain development.*

For more, see GHI's policy paper: International Trade and Agriculture: Supporting Value Chains to Deliver Development and Food Security.

26. Ekaterina Krivonos, FAO, Italy and co-facilitator of the discussion

Dear participants, I read with great interest all your contributions and would like to thank you for this rich discussion with many (often polarized) views.

As Susan pointed out, most of you are skeptical about the contributions that trade can make to food security. Concerns that many of you have with trade (and opening up markets) include the vulnerability of the local food systems, competition from outside displacing small farmers, selling outside the community that could leave the local population with less or more expensive food. You also mention the detrimental effects to the environment from switching to larger agriculture (an example with soy production in Argentina was mentioned by Ricardo). Others highlighted that trade can improve food availability, but could negatively affect utilization and stability if it introduces phytosanitary or other risks (Abdybek from Kyrgyzstan and Moises from the Dominican Republic both mentioned that). The issue of inferior nutritional quality of food that is imported at a cheaper price was raised by Ghose from China. Jean-Marc wrote that getting the price expectations right is not an easy task for farmers, and this creates price volatility, which in turn diminishes the incentives to investment. In terms of benefits to producers that could potentially engage in trader, many mentioned that small farmers not able to comply with strict technical and SPS standards in the export markets.

Dennis from AfriGrains highlighted a major shortcoming that is a systematic "blockage" to food systems caused by inadequate attention to storage, transport and marketing. These weaknesses are often ignored by policy makers, leading to a failure by farmers to produce sufficient quantities of food and constraining the flow of food from farms to consumers. This leads us to believe that a whole lot more needs to be done to develop domestic markets and logistics, and more importantly, to ensure that farmers are supported with proper instruments to overcome these constrains.

Many point out that the interaction between trade and food security varies greatly depending on the country's situation with producing own food, market structure, share of small farmers, government policies etc. As Sally points out, often small farmers lose from greater trade, while the middle sized to large farms stand to gain. Uneven/unfair distribution of benefits from trade is perhaps the theme that is mentioned as one of the main concerns in this discussion.

These are all very real and valid concerns and we do need some serious thinking on how to address them. In your comments you offer solutions to overcoming some of these weaknesses. Personally I don't consider the suggestions to eliminate trade (banning exports and/or imports) and having each country produce all the food they consume as a viable one. Relying on own production only (even leaving aside the efficiency arguments where one country that is more efficient at producing certain products – say wheat in Argentina – can produce the godo at a lower cost, implying a lower price to poor consumers), implies greater risks of disruptions in supplies due to weather-related emergencies, wars and other failures. I am not familiar with any evidence showing that moving towards this model (in essence, isolation) has produced positive results in terms of food security. North Korea comes to mind as an example of the opposite. But if anyone is aware of any positive cases, it would be beneficial to share them.

The more balanced approach (offered for example by Dennis Bennett) is that there are often unintended negative effects from greater trade openness and these need to be dealt with ex-ante. Dennis mentions that trade agreements need to be evaluated for their effectiveness in supporting food security and development of value chains. I would only add that, from a national priorities

perspective, food security would not be the only goal (although certainly one of the central ones), but there would also be other aspects of economic and social development to concider, including poverty reduction, better health and education systems etc.

Some of the solutions listed by the participants include:

- Greater participation of farmers in trade negotiations to ensure that their views are incorporated;

- Safety nets to accompany trade agreements (to solve the issue of uneven distribution of gains);

- Attention to local food security value chains, addressing the issues in a "bottom-up" fashion and an integrated approach to developing comprehensive food systems, including all stages of production and marketing .This includes solving the problems with storage/marketing/transport/creation of markets;

- Technological innovations (which need appropriate investment) and support programs to improve the access of small to finance and technical assistance;

- Inclusive business models.

Many coincide that trade can enhance food security, but certain conditions must be met (ensuring food safety and crop diversity was mentioned by Vijay, for example). On a global scale, the interests of the poorer countries should be considered as the first priority when negotiating trade agreements.

These are certainly valuable ideas, and I hope this holistic approach to ensure that farmers benefit from participation in markets – be it local, national or global – will gain more ground.

One thing is emerging rather clearly: Subsistence farmers are at greatest risk from open trade, it does not seem to be a viable strategy to simply open up markets without taking care of the weaknesses outline above first. Substantial assistance is needed to give a boost to domestic production, to ensure that smaller farmers advance to a more competitive position before opening up for trade. That is the path many developed economies with advanced agricultural sectors have taken in the past.

However, Christian Haberli also has a point when he says that "farmer security is not food security". While border protection and farm support would clearly benefit producers but whether or not it is the best strategy for national food security (and the global food security) is a different question. Let us not forget about the consumers in this discussion.

It is not easy to draw any conclusions from all this. I am perhaps repeating what I put in the introductory comments, but trade ALONE cannot solve food security or poverty problems. I don't think anybody can reasonably suggest that opening up for trade would be the solution to these serious issues.

The more practical and relevant questions could be:

First, would countries be better off in a closed economy, relying only on own production? I have yet to see any evidence of that.

Second, as most of us agree, trade has advantages and disadvantages, sometimes severe, and there are certainly people who would lose from trade, as from any other major reforms. So, who should we prioritize? Farmers? Consumers? All population? And what are we trying to achieve? Poverty reduction? Food security? Increased farm incomes? Greater social expenditure (for safety nets,

education etc)? Unfortunately, all at once is not really possible. And if so, what degree of protectionism (or conversely, trade liberalization) would be adequate, given these priorities? One interesting piece of evidence can be found in this recent paper: http://www3.lei.wur.nl/FoodSecurePublications/25_Salvatici_et_al_Agtrade-policies-FNS.pdf

Third, let us say we have established what is our ideal rate of protection is under given circumstances of a country and the national priorities. How do we make sure that the benefits are maximized? What is need to be done at the national level? I think here the holistic food value chain approach suggested by Dennis would be very useful.

27. Vincenzo Lo Scalzo, Agorá Abrosiana, Italy

Dear Moderator,

That's a very large and ample topic to be answered, and it would take a long report of the relevant cases that would deserve a citation.

If I assume that food security is much larger that the protection of Food Quality per se because the definition of Security goes far beyond "safety" "risk " "conservation" etc, I feel that the scope - well defined in the topic note - is to provide a useful and usable series of suggestions for the training of the actors involved along the long chain from the field to the family table.

I have personally dealt with these issues during a round table that AgoraAmbrosiana, my debate organization, organized five years ago in Milan at the Società Umanitaria - Arte da Mangiare, with the Mercati Generali Milanesi SOGEMI SpA, one of the largest structure for food distribution in northern Italy.

The adopted procedures are debated in Europe every year, and major contacts are kept by the responsible managers and assistants to accompany, to protect the efficiency of statistical controls, of conditions of handling, reception, conservation, transport and finally distribution to the final consumer.

I suggest that in case of interest, to explore elements for the edition of the proposed documents, a full list of the present suggestions of practice should be collected and tested for their efficiency.

I'm personally in frequent contacts with the head responsible of SOGEMI Sicurezza, and take the occasion to inform that today (link: http://www.italiafruit.net/DettaglioNews/20540/mercati-e-imprese/sogemi-firmato-un-protocollo-per-la-sicurezza-nei-mercati-generali-formalizzata-lintesa-con-prefettura-sindacati-e-operatori) a general agreement has been signed to cope with the environmental conditions that play their role in the posted issue. I will be proud to bring the most pertinent and important issues that emerge from this discussion to his attention.

The Milan EXPO could become a spot for a meeting or moment of information on the issue.

I feel positively inclined to believe that the top Management of SOGEMI - Mercati Milanesi will support the aim of such an endeavour. Security aspects are certainly primary drivers to guide the proper value raw materials in manmade trade. My personal experience with half century practice in global Chemical Industrial Chemistry is in resonance!

Sincerely yours

Dr Vincenzo Lo Scalzo - Lo SCalzo Associates AgoraAmbrosiana - Milano - Mandelieu

February 4th, 2015

28. Ismaelline Eba Nguema, Université Mohammed V-Rabat, Morocco

[*Original contribution in French*]

Le lien entre commerce et sécurité alimentaire est à la fois évident, complexe et vaste. En effet, il n'est très difficile de comprendre que le commerce est susceptible d'influer sur l'accessibilité économique en générant de la croissance, qui compte à elle, est en théorie créatrice d'emploi. Pour preuve, aussi décrié que soit la mondialisation, la planète n'a jamais été aussi riche. Si l'on arrête notre résonnement ici, on peut dire que le lien entre commerce, sécurité alimentaire, du moins on se focalisant sur l'accessibilité économique est autoentretenu. D'ailleurs, les fervents défenseurs du libre échange diront : nulle besoin d'intervention, le marché se chargera d'équilibrer et de répartir la richesse : c'est effet de « ruissellement ». Cependant, la réalité elle est beaucoup plus complexe à décrire, au moins parce que la mondialisation des échanges créée des gagnants et des perdants, qu'il y a des exclus parmi les gagnants, que les droits de l'homme s'inclinent face aux enjeux du commerce international.

Par ailleurs, le lien entre commerce et sécurité alimentaire est également vaste, car il impact toutes les dimensions de la sécurité alimentaire, que se soit : la disponibilité, la stabilité, ou encore l'accessibilité, au risque de nous répéter. Le commerce ne se limite au seul secteur agricole, il est en constante interaction avec les autres secteurs : industrie ou services. Au sein de l'OMC, ses accords sont donc en interaction non seulement avec le secteur de l'agriculture, mais aussi avec celui des droits de propriétés intellectuels touchant au commerce, du potentiel accord sur la facilitation des échanges, etc. Derrière, la volonté affichée des membres de l'OMC de tirer le meilleur pour leur nation (en termes des négociations) se cache l'action des firmes multinationales, qui moins visibles au sein de l'organisation sont les premières à tisser la toile du commerce international.

Toutefois, pour des raisons d'ordre méthodologique et surtout afin d'être brève, on va se contenter d'examiner comment est-ce que l'accord sur l'agriculture au sein de l'OMC influe que la sécurité alimentaire. Ce qui sûr aujourd'hui, c'est que les effets de cet accord ne se mesure pas à la taille de l'organisation, qu'il y a une multitude de parties prenantes, des intérêts colossaux, mais qu'il y aussi des hommes dans tout ça, non pas seulement ceux qui font les politiques mais également ceux qui en ressentent les effets.

La crise alimentaire de 2011 en Afrique et de 2008 dans le monde à remis en cause l'argument qui consiste à dire « spécialisez vous dans la production pour laquelle vous avez le plus d'avantages comparatifs et le commerce se chargera du reste ». De fait, le marché n'est pas toujours stable, les prix ne sont pas toujours bas, et l'alimentation n'est pas encore un bien de seconde nécessité. C'est en 2008, que le grand public a appris que les politiques agricoles des grandes puissances qu'elles soient émergentes ou occidentales peuvent avoir des répercussions néfastes sur les recettes d'exportation des pays les moins diversifiées et souvent le plus pauvres. Que la concurrence pure et parfaite est un mythe, et qu'en matière agricole tout reste encore à faire. On s'est également aperçu que les catégories telles que arrêtées par l'accord sur l'agriculture peuvent s'avérer arbitraires. Les subventions régies par les normes de la la boite bleue se sont révélées plus dommageables que celles de la boite orange et celles de la boite verte ne sont pas toujours neutres, elles sont également

difficilement applicables par les pays en voie de développement, surtout ceux de la tranche intermédiaire.

Tout l'enjeu des négociations actuelles est de réparer les errements du passé, de servir la sécurité alimentaire, et pourquoi pas d'être un catalyseur pour les pays les plus pauvres. Mais dans un monde dicté par les rapports de force, peut être que plus de transparence dans le processus décisionnel de l'OMC, et l'intégration de l'approche par les droits en matière de sécurité alimentaire pourraient être judicieux.

[*English translation*]

The link between trade and food security is at the same time evident, intricate and all-embracing. Indeed, it is not difficult to understand that trade is likely to improve ease of access to the economic system by generating growth, which is itself in theory a generator of employment. As proof, however much globalization is decried; the planet has never been so wealthy. If we stop at this point our reasoning, it could be said that the link between trade and food security, at least when focusing on access to the economy, is self-evident. Moreover, the strong supporters of free trade will say: no need for intervention, the market will undertake the balancing and redistribution of wealth: it is the "trickle down" effect. Nevertheless, the reality is much more complex to describe, at least because the globalization of exchanges creates winners and losers, because there are those excluded from the winners, and because human rights have to bow down before the issues of international trade.

Futhermore, the link between trade and food security is equally immense, because it has an impact on all dimensions of food security, whether that is: availability, stability, or even accessibility, if we may risk repeating ourselves. Trade does not limit itself only to the agricultural sector, it is in constant interaction with other sectors: industry and services. At the heart of the WTO, these agreements are therefore interacting not only with the agricultural sector but also with intellectual property rights related to trade and with the potential agreement on trade facilitation, etc. The desire displayed by members of the WTO to secure the best for their country (in terms of negotiations) masks the operations of multinational companies, which although less visible at the centre of the organization are the first to spin the web of international trade.

However, for methodological reasons and particularly to be brief, we will content ourselves with examining how the agreement on the agricultural sector at the heart of the WTO influences food security. What is certain today, is that the effects of this agreement do not measure up to the size of the organization, that there is a myriad of stakeholders, with huge interests represented, but also that there are individuals involved in all that, not only the policy makers but also those who are not in favor of the outcomes.

The food crisis of 2011 in Africa and of 2008 worldwide has challenged the argument that says: "specialize in the production of that in which you have the most comparative advantages and trade will do the rest." In practice, the market is not always stable, prices are not always low, and food is not yet a second level necessity. It was in 2008 that the general public learnt that the agricultural policies of the main powers, whether they are emerging or western, can have negative repercussions on the export earnings of less diversified and often the poorest countries. That pure and perfect competition is a myth and that in agricultural matters; everything still remains to be done. They have also realized that the categories as promulgated by the agricultural agreement can be adjudged to be arbitrary. The subsidies governed by the norms of the blue box have been revealed as more damaging than those from the amber

box and those of the green box are not always impartial. They are also difficult for developing countries to apply, particularly those classified as intermediate.

The whole object of the present negotiation is to repair the wrongs of the past, to promote food security and, why not, to be a catalyst for the poorest countries. But in a world run by power relationships, maybe more transparency in the WTO decision process and the integration of rights in terms of food security would be wise.

29. Susan Bragdon, QUNO, Switzerland and co-facilitator of the discussion

Dear Contributors,

The interesting discussion continues. It is wonderful to be able to share thoughts and experiences regarding the relationship of trade rules to food security. I have put some questions that seem worth exploring further in *italics* and **bold** in the body of the text below.

I believe the isolation/"free" trade dichotomy is a false or at least an unhelpful one. It keeps us from having the richer, more nuanced conversation about the relationship between trade and food security, what trade can and cannot do, what role it can appropriately play in food security, and where/when/how it needs to be regulated or complemented to ensure food security. As Ann Steensland notes in her contribution, trade is not a zero sum game.

Ms. Steensland's post seems to argue that with an appropriate enabling environment, participation in a global export market is good for food security. Can participants in this dialogue (or Ms. Steenland) provide examples:

1. ***Where participation in a global export market has led to an increase in food security for the exporting country, how this increase in food security was measured, and what was the impact on diets?***
2. ***When has participation in a global export market not resulted in increased food security for the exporting country and what happened in those instances?***
3. ***Are there complementary policies that can ensure that participation in an export market benefits those in need? And getting back to our original question 3,***
4. ***What evidence and experience exists on the affect of a country's participation in export markets on small-scale producers in agriculturally biodiverse systems?***

Again, I want to avoid unhelpful dichotomies and this is not meant as pro-trade/anti-trade or pro-market/anti-market but to stimulate a conversation about the appropriate role for each and how they interface with one another so the result is better food security for all.

The global market may provide some tools to achieve the objectives of food security, but it cannot by itself fully satisfy the objectives related to food security and poverty alleviation. In the market, demand correlates with an ability to pay rather than to human need. Markets don't consider access to those most in need, distribution, research direction for the neediest, inequality, or justice.

Would a human rights impact assessment of trade rules as suggested by Dr. Schuftan help us in understanding what trade and global markets can and cannot do, and hence what other measures need to be taken and be (made) allowable by trade rules?

Mr. Castrillo states that free trade agreements contradict regional policies that support bio-farmers and processes seeking sustainability. He mentions the need for better governance and land tenure rules to generate favorable conditions to achieve more equity.

Mr. Kent summarizes the division between advocates of trade liberalization and its critics in terms of two connected points: 1) global markets are beneficial mainly to the rich and powerful and 2) strategies for self-sufficiency protect the weak from potentially exploitive relationships with those who are stronger.

Professor Haberli notes that farmer security is not food security. I would certainly agree, but also have concern that farmer security seems to be the piece most often left out of the policy equation and that is not sustainable for food security. And I guess I am really talking about small-scale farmers in agrobiodiverse systems being left out of the policy equation. Small-scale farmers not only produce a great deal of the food consumed in the world, given a supportive policy environment, they capture nutritional, health and other benefits such as the maintenance of social and cultural values and increased resiliency. What seems to go unrecognized in international public policy is the global public benefit, equally crucial to food security, that is provided by these small-scale farmers. They maintain, and many develop, genetic diversity in a dynamic, evolutionary setting responding to change providing the foundation to adapt crops to changing circumstances (and this cannot be replaced by the static system of gene banks though they are important complementary measures to on farm and in situ development and conservation). The management practices of these farmers are similarly evolving and responding to changing circumstances. They are, in reality, millions of experimenters/entrepreneurs at the frontlines of responding to new pests and diseases, changing water availability, climate variation etc.

Mr. Kent suggests that trade agreements include elements to protect the vulnerable rather than relying on markets alone. He mentions non-trade measures such as safety nets as part of a packaging of trade proposals with protection programs.

A few questions arise from this:

1. ***What are some of the non-trade measures needed?***
2. ***Is there sufficient policy space in current trade rules for these measures?***
3. ***Is policy space enough, and if not, what more is needed?***

30. Dennis Bennett, AfriGrains, Inc, United States of America

Thank you all for this continuing dialogue. Both moderators have raised some very important questions.

How can the FSVC approach address what is grown from a bottom-up perspective (rather than a market demand perspective)?

We believe there needs to a multi-faceted bottom-up approach to FSVC that includes education, market demand, and technology improvements.

EDUCATION: One of the important elements that Professor Louis Bernard Schmidt discussed in his multiple papers on the American Agricultural Revolution in the 1800s was “the establishment and growth of various agencies for promoting agricultural scientific knowledge”. We believe education is a necessary condition in “bottom-up” FSVC improvements. Local smallholder farmers and their children need to learn the modern science of farming as well as the basics of nutrition.

We are incorporating what we know today about sustainable farming methods, biodiversity, and nutrition into classes at the village level. We want the next generation of smallholder farmers to not only understand scientific farming, but be able to creatively apply that knowledge in appropriate, sustainable, and biodiverse ways.

This agricultural education will enable us to collaborate with the local smallholders to produce a much more nutritionally balanced "suite" of products than they now produce using current manual farming methods.

MARKET DEMAND: We are not only producing food ourselves, but we are also offering to purchase surplus food from local smallholder farmers. We have some ability to influence what type of food is produced at the local level by offering to buy specific types or varieties of food. This alone will not increase the diversity or nutrition of food, until farmers are educated about why they need to produce non-traditional crops, but it does reinforce the education with financial incentives.

TECHNOLOGY IMPROVEMENTS: Education and market demand for non-traditional products need to be combined with practical ways to produce those new crops. Some of the technology is new seed, some of the technology includes new ways/tools to farm. Bottom line, it is finding ways to assist local smallholder farmers to meet the desire (education) and demand for new, non-traditional crops.

How is what is grown determined so that diversity, including dietary diversity, is encouraged and how does this approach ensure that food gets to the hungriest regions?

This is a very important question. One of the oft-repeated comments all of us in food security have to overcome is "We have never done it that way before", followed often by the comment "If it was good enough for my grandmother, it is good enough for me…"

We are addressing the issue of dietary diversity using a combination of agricultural and nutritional education, demonstrations of non-traditional foods grown locally to improve dietary diversity (e.g., sample farm plots with new crops), and offering incentives to local farmers for non-traditional crops.

Moving food to the hungriest regions is primarily a transportation and logistics challenge, especially when combined with market pricing. A historical example may help to demonstrate the issue. In 1830, it is reported that the cost of moving a wagon load of grain 60 miles to Chicago was greater than the sale price for that grain in Chicago. The result was that no grain was shipped 60 miles to Chicago. It was not until the cost of shipping grain dropped substantially due to the opening of a canal, followed by railroads, that Chicago became a major grain center.

The situation is the same today. The cost of transporting from food surplus areas to food deficit regions has to be in line with the market price at the delivery/sale point. Supply chain literature has much to say on this topic, of course.

The challenge in areas where subsistence level farmers have lost their annual crops (and thus will starve without external assistance), is that they have no resources to purchase food they were planning on growing themselves. This is where the World Food Programme must enter the picture, because by definition subsistence level farmers do not grow enough food for more than a single crop year, nor do they have storage methods or capacity to safely store food from one crop year to the next.

The long-term, systemic solution to the dilemma of the subsistence farmer is to change both farming methods so that they are capable of growing surplus food, and the storage technology so that they can safely store grain from one year to the next. A corollary option is to encourage farmers to grow surplus food that they can sell, and encourage financial savings using mobile

banking technology. This would enable them to purchase food at market prices should their crops fail.

How does the FSVC approach encourage the continuous process of developing and maintaining agriculturally biodiverse systems (one of the components mentioned in question 3)?

In our experience, agriculturally biodiverse systems are a future development goal for much of East Africa. However, long-term agriculturally biodiverse systems (ABS) can be developed and maintained through a combination of local education, market demand and incentives, reinforce by demonstrations on the practical benefits of ABS. Education on nutrition and sustainable farming methods creates the awareness and knowledge, local incentives provide financial benefits of behavior change, while demonstrations of the practical benefits shows that "ABS really works".

Is the market-based, traded system resource intensive? What about negative environmental externalities beyond the loss of biodiversity?

The transformation from human-powered, manual farming and transportation to animal-powered then to mechanized farming & transportation systems enables increased productivity with less labor. This transformation is capital-intensive, for it requires capital to purchase a horse, oxen, tractor or plow. It is more efficient to carry farm produce in bulk, via truck, barge, or ship than to carry the same amount of produce on the backs of people. But someone must provide the capital to purchase those productivity-enhancing tools, and the market prices must work so that investors or lenders earn a return.

Negative environmental externalities have frequently occurred in the FSVC where we have not been aware of those negative effects. In general, farmers are (and should be) long-term stewards of their land and resources, so the most sustainable methods provide earnings now and long into the future. As improved sustainable methods are developed and proven to work, implementation occurs as that knowledge travels and capital becomes available (if necessary). The combination of education/knowledge transfer at the local level, combined with technology improvements and behavior changes, should minimize environmental externalities.

Can one use the FSVC approach and support small-scale farmers in agro-biodiverse systems? How is specifically does it do this?

Supporting small-scale farmers using the FSVC means educating small-scale farm communities, removing"blockages" to the FSVC, and encouraging behavioral/cultural changes where necessary to create a robust, sustainable, agro-biodiverse local "system". Each element is a necessary condition, but separately are not sufficient conditions to create sustainable agro-diverse systems.

Education in agricultural science and nutrition needs to be incorporated at the primary school level, as part of the standard curriculum. In regions where it is rare for children to attend school beyond Primary School, the farming and nutrition curriculum needs to be included to reach the broadest possible number of students.

Agro-biodiverse, surplus food production needs to be incented through offers of forward purchases of food at planting time, because it is too late to effect behavior change (i.e, plant more crops) any later in the crop cycle. If additional seed is required, then innovative solutions (e.g., "seed loans") should be adopted so that that farmers are able to plant and grow surplus crops.

At harvest time, storage and handling facilities have to be available to thresh, dry, and store the newly created surplus crops. Trucks, roads and barges need to be acquired to transport surplus produce to storage facilities, and to markets. Supply chain logistics are very important to solving the FSVC impediments.

Price risk of the trading company or food cooperative or intermediary must also be carefully managed, so that they can pay reasonable prices for local agro-biodiverse food and profitably store, transport and sell that production to the end consumers.

Dennis Bennett

CEO, AfriGrains

31. Nikolai Fuchs, Nexus Foundation, Switzerland

Dear All,

as to point 1.: For my observation it is pretty clear, that free trade in most cases contributed positively to four dimensions of food security - for most people in the world. But it didn't reach the rural sites at the periphery specifically and came at high - one may say too high - environmental costs. So this appoach needs correction.

As for two (coherence): for 800 million hungry people the current system doesn't work. The trade system is one component in it. Around 70% of the hungry live in rural areas. The theory is, that social safety nets would take care fo the loosers of competitive market economy. But the social safety nets are, if at all existent, translucent. Given the right to food, more coherence would be necessary. For more coherence one approach could be the Rights Based Apporach, but, as we see, it would need more translation into specific agreements concerning the food system. I think, to gain more coherence we must understand the specificity of the food system more in depth.

As for three (compatibility): Because agriculture (the food system) is special, there has been and is in the WTO the special Agreement on Agriculture (AoA). Although the specificity of this sector is addresses with the AoA, the content of todays AoA - see the preambula - is as well "market orientation", like in any other agrement. Market orientation is today mainly read as "export orientation", which, in the end, means specialisation and therefore industrialization of agriculture. Small scale farmers in agro-biodiverse systems are ruled out by this mechanisms. There is - so far - no compatibility. The compatibility would rise, if (negative) externalities would be integrated in the price of goods - nitrogen surpluses for example. Only then the market could really play. But this isn't the case today. But even then - the industry logic of specialisation is against the diversity principle of nature - and therefore agriculture. To preserve (bio-)diversity we need a different orientation than market orientation. I opt for "development orientation" instead. - Development of soil fertility (i.e. carbon storage), development of sovereign seed breeding, development of local markets and resilient communities. The food system is from its nature of local character - short ways, freshness, trust, diversity. That doesn't mean no markets or import and export. But only complementing the local oriented food systems. Indias approach for food security in the Bali package makes it obvious - for food security purposes we need a different rule setting, than in other cases. - I think we have to make a decision: we should accept, that the food system is specifically different to other sectors. It needs an own set of rules, as already addressed with an AoA. But this

AoA needs a different inlay than of today. As agriculture is the main stumbling bloc in the WTO and many ather FTAs - if we find a solution for this sector, many other market access negotiations could start flourishing. The rule for the food system would be something like "local is first choice". It would be in good tradition of liberal thinking, that people can decide for themselves what they want - make preferential decisions; this should be "allowed". Tarrifs and other NTBs wouldn't be necessary, so no "protection" would occur to hinder the free flow of other goods where needed.

32. Christian Häberli, World Trade Institute, Switzerland

Ekaterina, thanks for your summing up. I am not much for triplicas but Max Blanck asked me to feel free to react. (Btw, your reference to the Salvatici study is welcome. My favourite of a bridging attempt remains Jennifer Clapp even where I do not agree with her.

You are right: even scientists, let alone stakeholders, have "often contradictory" views. But when you call for a "holistic food value chain approach" is this not a diplomatic term avoiding competition of ideas and among food suppliers? Pascal Lamy and Olivier de Schoutter cannot be both right! (I have argued elsewhere that they are both wrong.)

On the trade liberalisation vs food security debate, my view is still that the former is a blunt instrument able to both free AND kill farmers. By this I mean that neither towing the free trade line OR calling for food sovereignty ensures more food security. My last word, in CNN speak, would be that when the chips are down, safeguards are better than tariffs. And, in WTO speak, Green is better than Amber - but it will be a long time before this sinks in with policy space defenders, and Doha Round negotiators, everywhere!

33. Lal Manavado, University of Oslo, Norway

Effect of Trade on Food Security

In most societies today, there is an intense, and at times absurd, division of labour. And while environmental degradation continues apace, world population continues to increase. It is within this framework that we ought to try to understand the effect of trade on food security.

Division of labour gives rise to a set of secondary needs connected with our nutritional needs. Other things being equal, trade is concerned with enabling us to satisfy those secondary needs, for instance, making food physically accessible (by placing it in shops, storing it until needed, and transporting it, etc).

Therefore, it may be argued that trade plays an important part in giving us food security, especially as proper storage of food, packaging, and transport are costly and complex operations. This is true as far as it goes, but trade is not motivated neither by a desire to observe the 'golden mean', nor yet by altruism. It is this aspect of trade that can turn it a threat to food security.

When there are no clear legal limitations on the extent of profit one may gain by food trade, or consideration of its impact on food security, trade can pose a serious threat to food security of a community.

It is not so long ago that the so-called Great Grain Robbery took place, and paradoxically enough, it was not committed by 'capitalist culprits'. Now, the necessary conditions for food security are its sufficient production and general availability. For the sake of simplicity, I shall not include another important factor, viz., its affordability at this point.

With respect to the effects of trade on food security, sufficient food production cannot be sustained if the producers are not sufficiently rewarded for their important role in society. However, when one looks at the retail food prices and what the producers get, and what the intermediaries earn by storage, packaging, transport and selling, one can easily see that both food producers and the consumers are at a considerable disadvantage. So, food trade as it is practised today does not seem to promote food security.

Moreover, speculation in food stuffs as practised in 'future markets' is based on buying as cheap as possible, keeping them in storage until demand rises, and sell it at the highest possible price. By any standard of justice, higher production should entitle the food producer to reap benefit of his work, but here, it is the opposite. What is even worse for food security, consumers will have to pay more for what was bought very cheap. High retail prices are obviously a threat to food security.

I think food producers should be encouraged to form moderate sized cooperatives to handle their produce, so that everybody involved in food trade from the producers to the consumers will have fair play. This will encourage many more people to take up agriculture as a profession, rather than shunning it as many do now.

I would also like to mention how well-meant but ill-adviced economic advice to promote trade could reduce food security. The well-known case is that of Senegal and the Cameroons during the 1980'ies.

During the pre-advice era, peanuts were one of the main sources of protein in people's diet in those countries. It was extensively cultivated, cheap, and widely available. The people enjoyed a reasonable food security, and then the two governments entered into trade. Peanuts were changed from being a food crop into a cash crop. They were gathered and exported, mainly to France for industrial processing.

A few years later, most children in those coutries were malnurished, and the same applied to the adults. Foreign currency from peanut exports did not go into sustain food security, and one important component of the people's diet became scarce and dear. This is a classic example of food trade undermining food security.

I think as civilised people, it is time for us to appreciate that it is not permissible to regard food as a mere article of trade open to every kind of speculation and sharp practice. Food represents the possibility of continued life. Hence, it is high time that the international community with its pretensions to civilisation, draws up an enforceable code conduct for trade involving food, and moreover, empower the producers and consumers so that they can get more involved in the food distribution chain to their mutual benefit.

Lal Manavado.

34. Dennis Bennett, AfriGrains, Inc, United States of America

Free Trade, Food Security, Human Rights & Opportunity:

It is important for Food Security and Free Trade that participants work together AS participants/partners, treating all stakholders with dignity and respect. Our "bottom-up" approach to Food Security Value Chain is based upon historical precedent from the US mid-1800's Agricultural Revolution, which perhaps needs a bit of contextualizing. Our underlying premise is that all humans are created equal, regardless of whether they live in a grass hut, a chalet in Gstaad, or a Park Avenue townhouse.

In 1821, Nathan Dillon was one of many families that migrated from the Ohio frontier to the Illinois prairie. His children died from starvation, exposure, and diseases such as cholera. They had no doctors, no schools, and were subsistence level farmers in every way. In the Midwest US just 50 years ago there were still farm communities that had no indoor plumbing, no electricity, and no telephones. The point is that none of us are far removed from the rural farm areas of America, Africa or Asia.

Human innovation and drive, combined with education, technology improvements, transportation, storage, and market development, were the "necessary and sufficient" conditions that enabled the Revolution in mid-1800's US Agriculture. Trade Policy, Agricultural Policy, and Food Security Policy all need to support those "necessary and sufficient" conditions. Our role is to provide those opportunities to support those "necessary and sufficient" conditions.

What is very exciting is that as we make opportunities available to local smallholder and rural farmers, (necessary & sufficient conditions) the following generation will not only surpass their parents, but their creativity will apply the technology and knowledge in ways we can not even imagine. The students will become the teachers.

Dennis Bennett

CEO, AfriGrains

35. Gérard Choplin, former coordinator of the European Farmers Coordination, Belgium

1. From your knowledge and experience how have trade agreements and rules affected the four dimensions of food security (availability, access, utilization, stability)?

The issue is not to oppose trade and food security, but to discuss which trade rules are decreasing or increasing food security. It is about the priorities given to agriculture and trade policies. Trade should be put at its right place, not more, not less.

The fact is that the present international trade rules (GATT agreement signed in Marrakech, 1994) have failed. They have been formatting the agriculture policies of all WTO members from the 90es. Priority was given to the “competitiveness on international markets”, as we could see for example with the evolution of the European agriculture policy. To import more (the WTO rules impose to import at least 5% of consumption of each agricultural product, even if the country has surpluses), to export more was the new trend.

Food security should be the first priority of any agriculture policy. If it relies very much on import/export, it is vulnerable and can be put in danger in case of crisis. It is not the same to have

food available coming from far away or coming from the region. The globalization of agricultural markets with the present international trade rules is working against food security because it is increasing dependency of people, regions, countries on international trade.

By putting all farmers competing on a global market, the present WTO rules put prices at the level of the lowest costs of production , or at the level of prices artificially low because of subsidies, and excludes many farmers from their own local/regional market. As we can see for example with the export of EU milk powder , chicken, grain,… ruining production capacities in Africa.

The WTO rules allow rich countries to continue their dumping: they just moved from export subsidies to direct decoupled subsidies put in a "green" box, which is nothing else as the whitewashing of dumping.

The abandonment of supply management policies, of public grain reserves and the financiarisation of agricultural markets have increased the volatility of agricultural prices, which is destabilizing agriculture and food security. When food prices are going suddenly up as in 2008, it is dramatic for rural and urban poors.

Indeed the WTO rules and the "Free" Trade Agreements ("F"TAs) have not only decreased food security or made it relying too much on import/export, they have decreased the capacities of the countries to develop appropriate policies for their food security. They have decreased food sovereignty. Power has moved to international companies benefiting first of international trade and using the huge differences in production costs, labour cost, environmental costs, and taxes.

2. What is your knowledge and experience with creating coherence between food security measures and trade rules? Can rights-based approaches play a role?

To create coherence between food security and trade rules, we have to change the present international trade rules and FTAs. There is no stable food security without food sovereignty. We need new trade rules based on the right of food sovereignty, which should be recognized at UNO.

Michel Buisson has developed a detailed proposal to be discussed (book in French: "conquérir la souveraineté alimentaire" http://www.editions-harmattan.fr/index.asp?navig=catalogue&obj=livre&no=41507)

Food sovereignty will deliver other priorities to agricultural policies and give new space to agricultural policies, putting trade at its right (still important) place. Countries or regional unions of countries would have the right to define their own agriculture policies, with a ban of any form of dumping regarding third countries (export at price below the production costs of exporting country).

For achieving food security, the priority of any agriculture policy should be to feed the population first with local/regional products and no more import/export. This would also respond to the climate and energy challenges by limiting transport on long distances. Trade remains important between regions/countries with surpluses (especially for grain) and regions/countries with deficit, but also to exchange specific products. Each region has specific products to exchange with other regions. To stabilize agricultural prices, markets should be organized, with the constitution of public grain reserves.

3. How can a food security strategy, including components that explicitly support small-scale farmers in agro-biodiverse settings, be implemented in ways that might be compatible with a global market-based approach to food security?

I agree with JM Boussard. It is impossible in the present WTO/"F"TAs framework. CFS report 2011 on price volatility and food security, reports of Olivier De Schutter UNO, FAO A.Sarris proposals of June 2009,….. demonstrate that the WTO trade rules of 1994 and the "liberalization " of agriculture markets have failed to achieve food security; they have made the situation worse. And they increased other problems like climate change, biodiversity erosion, energy consumption.

We need a new approach, a new paradigm, new priorities which benefit populations instead of a few companies. Let us develop a local market-based approach to food security, keeping international trade at its right place.

36. Dennis Bennett, AfriGrains, Inc, United States of America

What were the "necessary and sufficient" conditions that enabled the mid-1800's American Agricultural Revolution and how can we replicate/update/adapt those necessary and sufficient conditions in 2015 for Africa?

Here are my answers on the "necessary and sufficient" conditions:

1. Farm improvements (seed, mechanization, etc)
2. Storage (grain elevators, aka storage & handling methods)
3. Transportation (canals, railroads - adapted to rivers and roads today)
4. Markets (grain merchants that travelled to farms, the Chicago, Minneapolis, etc. boards of trade, Liverpool grain market, Chicago Futures Markets)
5. Communications (often included in "Markets" - the transcontinental telegraph, transatlantic telegraph, adapted to mobile phones, tablets, laptops, radio and television)
6. Scientific Agricultural Education (adapted today to Primary School curriculum)
7. Land Policy (enabling farmers to buy government-owned land inexpensively) Plus perhaps an 8th: political stability.

These are based primarily on academic literature, especially Louis Bernard Schmidt's articles from the 1920s-1930's, quoted by subsequent researchers in the 1940's - 1970's. Harvard Kennedy School Associate Professor Ryan Sheely and I are collaborating on a much more detailed journal article on this topic.

One final comment to emphasize why these "necessary and sufficient conditions" need to be adapted to local conditions: the locals know where the elephants walk at night. Never bet against local knowledge. You will lose the bet.

Dennis

37. Ruth Campbell, ACDI/VOCA, United States of America

Re. the link between smallholders' participation in export markets and food security.

To the broader question: there is strong evidence that the removal of trade barriers leads to improved food security—particularly through the prevention of food price spikes. (See, for example, Kym Anderson and Johan Swinnen's presentation on "How can trade improve food security in sub-Saharan Africa?" at http://fsi.stanford.edu/multimedia/how-can-trade-improve-food-security-sub-saharan-africa-0 or my own paper, "Feed the Future Learning Agenda Literature Review: Expanded Markets, Value Chains and Increased Investment" athttp://agrilinks.org/library/feed-future-learning-agenda-literature-review-expanded-markets-value-chains-and-increased).

There is also evidence that smallholder market participation in general is key to poverty reduction. (See, for example, "Smallholder market participation: Concepts and evidence from eastern and southern Africa" by Christopher Barrett.) The impacts on smallholder farmers of engaging in export agriculture of course depend on the specific market structures and integration mechanisms. Ashraf, Giné and Karlan provide a cautionary tale of depending on a single buyer in "Finding Missing Markets (and a Disturbing Epilogue): Evidence from an Export Crop Adoption and Marketing Intervention in Kenya."

But well-structured export development initiatives, that strengthen multiple market channels and ensure an equitable sharing of risk, can substantially increase incomes, which can be invested in ways that strengthen food security. ACDI/VOCA's projects in support of smallholder production of specialty coffee in Ethiopia, birds eye chilies in Malawi, and cocoa in Vietnam—to name but a few—have allowed small-scale farmers to increase their incomes, accumulate assets, and diversify their livelihoods to increase their household food security.

Data on impact on diet seems to be much harder to find. It is an area that we at ACDI/VOCA are investing in now—and we would love to hear from others who have measured nutritional improvements as a result of incomes increases. We know, of course, that even when dietary diversity increases, the inclusion of unhealthy food groups means that this does not necessarily improve nutrition. And we all know anecdotally that incomes alone don't lead to nutritional gains, but that nutritional education, improved sanitation, health services, etc., are also required. So smallholders' inclusion in market-oriented production can be part—but will not be all—of the solution to food security.

38. Ekaterina Krivonos, FAO, Italy

I would like to respond to Christian Häberli. Certainly one can be too diplomatic, in part that comes from the experience of dealing with sometimes very sensitive issues through interaction with governments. In that context, how you phrase things becomes quite important. In this particular case, however, I was not trying to reconcile irreconcilable trade stances, but merely pointing out that trade can be beneficial for food security, but not trade alone: A lot of the work has to be done at the country level first.

The "holistic food value chain approach" was borrowed from the commentary by Dennis, who advocated addressing the multiple challenges that farmers face as part of a value chain. He has a very strong point. If governments (but also international organizations, donors, NGOs) focus only on production – which in fact occurs in many projects – ignoring marketing and logistics bottlenecks, these investments would be lost or could even make matters worse locally (consider

local prices dropping in case of oversupply if farmers are given seeds and technology to produce more than usual and without a proper outlet to other markets).

At the other extreme, introducing trade reforms, or changes in the way market functions (e.g. withdrawal from state trading or changing the rules for domestic marketing or export procedures), or, say, assisting cooperatives in setting up export operations – all that without having the necessary volumes of production or products of certain quality – is also a completely lost effort. I have seen this in many countries, and I am sure you have too. Hence, very loosely, I called it a "holistic" approach, meaning that if we want the agricultural sector (or food security, not the same thing, sure) to benefit from trade, the whole chain needs to be considered.

39. Biswajit Dhar, Jawaharlal Nehru University, New Delhi, India

This is a fascinating discussion and I do regret joining it so late.

I think Susan has introduced the extremely relevant issue of "non-trade" measures. Carving out the non-trade measures is indeed a task that the trade regime has not addressed despite being called upon to do so on numerous occasions.

The architects of the WTO Agreement on Agriculture (AoA) had stated in the preamble to the Agreement that the "reform programme [initiated by the AoA] should be made in an equitable way among all Members, ***having regard to non-trade concerns, including food security*** ..." (emphasis added). But, despite the fact that the importance of food security was noted, the AoA did not include specific provisions that WTO members could use to ensure food security for their populations. This issue came up once again during the mandated review of the AoA in 1999, which also saw a number of interventions aimed at formalising food security as a non-trade concern. Finally, the Doha Declaration spoke of the mainstreaming of the special and differential treatment in the AoA "so as to be operationally effective and to enable developing countries to effectively take account of their development needs, ***including food security*** and rural development" (emphasis added). In the agriculture negotiations in the Doha Round, the G-20 and the G-33 groupings pushed for the "special products" and "special safeguard mechanism" as two instruments that can help in realising the objective of food security and rural development. The issue of "public stockholding for food security purposes" reminded us once again that the developing countries' efforts to meet the objective of food security in the policy regime underlined by the AoA can face serious headwinds.

Two decades of implementation of AoA has made it fairly obvious that the objectives like food security do not sit well with the rules of trade liberalisation. In fact, recognition of "non-trade concerns" like food security are seen to run counter to fundamental tenets of trade liberalisation, for such concerns can only be addressed through the use of policy instruments. One of the key objectives of trade liberalisation is to limit the policy space available with the governments, so that they are not able to introduce policy instruments that "distort" the functioning of the markets.

Therefore, the real challenge is to design a framework wherein trade rules and agriculture policies can be mutually supportive. Further, agricultural policies must be anchored on the needs of the small-holders, since this is the section that suffers from the worst forms of food insecurity. This implies that the key to ensuring food security at the household level in a large majority of developing countries is to provide security of livelihoods for the small and marginal farmers. There is overwhelming experience that the markets do not recognise the needs of these producers and therefore policy interventions are necessary to support them. While the details of the interventions can be worked out on a case-by-case basis, it is imperative that a robust framework is developed for dealing with the scourge of food insecurity.

40. Ismaelline Eba Nguema, Université Mohammed V-Rabat, Morocco

Bonjour chers tous,

suite à ma première contribution, je vous fait parvenir un opinion paper (*Trade Liberalization and Food Security: For a New Green Revolution in Africa* http://www.fao.org/fsnforum/sites/default/files/resources/jfs-2-2-1%20%284%29.pdf) que j'ai eu à réaliser avec un collègue afin de partager quelques propositions concrètes sur le lien qu'il existe entre sécuirté alimentaire et ouverture commerciale.

Ps: ce papier cible plus particulièrement le continent africain.

41. Leanne Ussher, City University of New York, United States of America

Since I haven't seen any posts on buffer stocks I wanted to say something about this as well as give some context.

In the past 50 years buffer stock schemes disappeared from the international agenda, and are given scant attention by most economists. Yet the rationale for international commodity buffer stocks, especially in a world of global climate change, is stronger than ever. This post tries to put in perspective the role that supranational commodity buffer stocks can play as opposed to national or private buffers, and what that might mean for global food security.

Market volatility and persistence (a long continuing movement away from the mean path) in prices for staple grains, and other primary commodities are well accepted phenomena. This volatility creates havoc for producer incomes, calculations of long run opportunity costs, optimal investment paths and food security for consumers. The inelasticities that exist in commodity supply and demand, herd behavior in speculative global markets, production lags and cob web cycles in quantity and prices, hoarding with rising food insecurity and beggar thy neighbor trade policies by nations, mean that there are large welfare losses that arise from commodity price volatility. Market prices for staple foods regularly lose their efficiency properties and normative trade theories that demonish governments for stabilizing food prices and holding national buffer stocks often loose their saliency.

Governments that stabilize domestic food and fuel prices at a low cost to economic growth and with participation by their citizens are typically rewarded with greater political stability, food security and domestic welfare gains [[1], [2]]. Both importing and exporting countries that stabilize stable grain internally will use the world market to dispose of surpluses or meet deficits through imports. By and large Asia, the US and Europe have figured out how to do this domestically but with large negative spillovers to the rest of the world. Africa does not have a viable strategy for stabilizing their domestic food prices, and the continent suffers even more from the instability in world markets transmitted from the Asian, Europe and US approach to price stabilization, agricultural subsidies, taxes and agricultural trade policies. At its heart we have a coordination problem that has resulted in a food crises every three decades, and a system where both public and private sectors in poor regions undervalue agricultural investment and have a bias towards urban domestic policies [[3]].

When talking about global markets and food security, it is important to take note of the actual size of world grain stocks, access to these stocks, and the role that private versus public inventories play in smoothing or destabilizing prices. Those fearful of global warming have advocated that world grain stocks should increase to 110 days (enough stocks to feed the world without any further harvest) to avoid rising volatility. World grain stocks from1985 to 2000 were often over 100 days. Since 2000, global grain stocks, normalized by consumption, have averaged 12 percent lower than 100 days [[4]] and this might explain higher commodity price volatility.

Studies have found that price volatility, while related to many different factors, when coupled with low world stocks can generate large price swings [[5]]. Low interest rates reduce the cost of storage, and can promote private stores that can smooth commodity prices when shocks to supply and demand are thought to be temporary, or idiosyncratic. However private inventories have little effect on the deviations of prices originating from persistent or macroeconomic shocks, as long-lasting shocks do not allow inventory smoothing to be profitable. [[6]]

In a low interest rate environment, the price impact of idiosyncratic shocks is reduced but persistent or common shocks still affect prices and as a result there is a much higher positive correlation between commodity prices [[7]]. Other explanations for the increase in correlation between commodities is financialization of commodities [[8]], and the growing prevalence of common shocks, combined with lower interest rates.

It is possible that public commodity buffer stocks [[9]] may be better at stabilizing prices when there are persistent shocks since governments can go beyond short term views. In China, where public stocks are more common price volatility and correlation across commodities is lower that in similar commodity prices traded in US financial markets [[10]]. However commodity or grain stocks are not evenly distributed across countries. For example China with its immense government resources and positive historical experience with the 'ever-normal granary' has stockpiled enough grain for 6 months consumption. With only 20% of the world's population, China had 45% of corn, 32% of wheat, and 44% of rice world stocks in 2013 [[11]].

If we accept that government buffer stock policies may improve the welfare of a country, ignoring the negative spillover effects that policies have on other countries, very few countries are endowed with the resources to finance such stock piles. Indeed it is typical that those who would best benefit from stockpiling, countries that are dependent on particular primary exports, are least suited to maintaining buffer stocks. When prices decline and incomes are reduced producer cartels are the least able to spend money in buying stocks and stabilizing the price. In addition, there is limited incentive to reduce prices and sell from their stockpile when prices are high. This is one reason why producer commodity buffer stocks often fail.

Likewise, while there is evidence that the size of Chinese stockpiling may have supported world prices in a number of commodities, it did not help dampen price increases since their longer run goal was to secure supplies which created an asymmetric policy of buying when prices were low but not selling when prices were high.

Once we accept the rights of a country to protect its own interests despite the negative spillovers of their national trade policies, such as hoarding during a food crisis, subsidizing inefficient producers, we will find that both national and private stores will be ineffective in stabilizing world market prices from persistent shocks and insulating the poor from food insecurity.

International Buffer Stocks

The simple solution is to have international commodity buffer stocks protecting both producers and consumers. Various famous economists such as John Maynard Keynes, Richard Kahn, Benjamin Graham, and Nicholas Kaldor all advocated international commodity buffer stocks. It was argued that this would give autonomy to national actions by limiting the negative spillovers of their national trade policies. By introducing this residual buffer there would be more welfare improving free trade and commodity supply would be made elastic. The buffer stocks would be run by an international commodity corporation (ICC) with both producing and consuming countries represented on its board. A corridor floor and ceiling could stabilize either individual prices or a commodity index, and this would encourage long term investment, stabilizing speculation with private inventory smoothing within this range. Price stabilize would be based on some long run average, discerned by technocrats and experts in charge of running the buffer stock. The commodity target would be pre-announced and modified rarely. The ICC would buy commodities when prices fall below a pre-stated floor and sell when prices rise above a pre-stated ceiling. An alternative to individual commodity buffer stocks is the stabilization of a basket of commodities or an index where commodity amounts are weighted in relation to their significance in world trade. This allows individual prices to fluctuate with market supply and demand, and the ICC buys or sells the basket to stabilize the index. There are some who debate whether stabilizing an index will ultimately stabilize individual prices, but as long as a single commodity in the basket does not dominate the rest, there are no monopoly producer goods included, and there is positive correlation between prices without the ICC, then the stabilization of the index will not only stabilize individual prices but reduce the positive correlation between commodities. Idiosyncratic shocks peculiar to each commodity will still be smoothed by private inventories.

While international buffer stocks are a top down policy, they would invest in bottom up growth through the establishment of local storage areas at commodity futures exchanges, ports, and even on-farm silos. Regular and independent audits would need to occur since the process of storage would be tied to an expansion of local credit facilities. The local exchanges and commodity credit unions could be subsidiaries of the ICC. Small scale farmers would have reduced risk, and the buyer of last resort role of the ICC would disempower transnational intermediaries from making excess profits. Many developing countries dependent on the export of commodities, would attain the income guarantees necessary for growth and economic diversification away from commodity dependence (not by disinvesting in commodities and agriculture, but rather by investing in commodities and allowing that surplus to finance industrialization and urban growth).

The discussion over international commodity buffer stocks have a long history. They were the mechanism for international counter cyclical monetary-fiscal policy in the original 1941 Keynes proposal for Bretton Woods. International buffer stocks were outlined during the creation of the FAO in 1943. They were in the outline agreed to at Bretton Woods for an international trade organization. They backed the new commodity reserve currency proposed by Nicholas Kaldor at the first UNCTAD meeting in 1964. And they were central in the discussions over the creation of a Common Fund in 1971. The political economy of why these proposals have been so thoroughly quashed each time they raise their head is due to an addiction by powerful entities to cheap resources and speculative profits. Their establishment was identified by the US as a transfer of income from developed country consumers to developing country producers. Since the 1980s and the move to free market economics, national buffer stocks have been dismantled under the criticisms that they were inefficient, corrupt, and destabilizing. Instead producers are encouraged to use futures and forward markets to lock in prices. While such insurance policies may stabilize

incomes they do not guarantee stability in world supplies of commodities nor their market prices. In addition they are costly and oriented towards short horizons.

A 2009 World Bank report [[12]] estimated that an international stock-pile to stabilize international grain prices during the 2008 food crisis would have required 10% of global production, worth roughly $66 billion, and costing $4–6 billion to maintain ($1.4 billion in storage costs and $3–5 billion of spoilage costs based on losses in high-income countries). To put this in perspective, total losses to all consumers from rising food prices in 2007 were estimated by the World Bank at $270 billion. Given that people, producers and consumers, value stability over instability, and that food spikes have large welfare losses, $6 billion seems like a small expense. Despite this, sourcing the cash flow, or loan, even if it is collateralized by the commodity stocks, will be a difficult task for the ICC, let alone a diplomatic nightmare. However, this financing problem was already solved in the original proposals by Keynes, Goudriaan, Hayek, Graham, and Kaldor. By having the ICC issue a new currency backed by commodities, this body can simply print money, effectively inventory receipts, which will be valued since they are backed by a basket of commodities, and transferable in the market place. This would involve the creation of a new secondary international reserve, something that many economists are calling for, and allow commodity trade to be denominated in this new currency, thus removing a large component of volatility due to USD exchange rate movements.

Having supranational body that prints money is not any different from a national central bank. For example, the Federal Reserve bought USD 3 trillion worth of financial assets over the past 7 years, which they now have as assets on their books. These assets will be unwound when the time warrants, and in the process they reduced the risk of deflation, recapitalized the banks, and helped the economy by injecting liquidity into the system.

An international commodity buffer stock bank would do something similar. By standing ready to buy commodities during a period of low prices they would inject reserves and liquidity into the system when commodity prices are low with direct payments to farmers (if needs be). Security in commodity incomes would alleviate country balance of payment constraints and allow them to borrow or earn the new international reserves. These new assets could recapitalize country balance sheets and stimulate world demand.

The ICC would offer the world an elastic supply of resources to facilitate industrialization and growth, a stable income and price level to producers that would encourage investment, inject liquidity (reserves) into the global financial system on a counter cyclical basis, reduce the negative spillover effects of national trade policies, and offer the world an alternative international reserve to the USD and thereby help amend the global imbalances problem between the US and China which has been blamed as a reason for the international financial crisis which led to the international food crisis [[13]].

Criticisms

There are a number of criticisms and questions regarding this proposal, and I list here only those that I have thought relevant to a discussion on food security and trade policy:

1) An ICC would encourage production of mono-culture crops.

2) An ICC reinforces the old colonial system where developing countries produce the raw materials which are sent to the developed countries to produce manufactured goods with higher returns.

3) An ICC would distort commodity prices and ultimately create a surplus of commodities that would later have to be destroyed.

4) An exorbitant amount of commodities would need to be stored to stop speculators from betting against and breaking the 'bank,' during rising commodity prices.

5) The cost of storage is expensive and needs to be financed through taxes on countries which will never agree to pay.

6) Stabilizing an index does not stabilize individual prices

7) Such a proposal is not politically viable

I will answer these criticism briefly, although each requires further study. My answers vary depending on the specific operations of the ICC, for example, an ICC that stabilizes a basket versus one that stabilizes multiple individual buffer stocks. The answers here will in most cases assume the more complicated basket buffer stock scheme is used with the ICC announcing a floor and ceiling index price target. This is similar to the Federal Reserve which targets an overnight interbank interest rate corridor, and offers an infinitely elastic supply of bank reserves until the rate is between their target floor and ceiling. In our case, supply functions of individual commodities are made more elastic but never necessarily infinitely elastic due to substitution between commodities in the basket. To simplify my explanations, price elasticities of demand for each commodity are considered to be similar. It is assumed that the weights of the basket (based on some pre-specified objective measure of international trade) approximate a fixed ratio of inputs into 'balanced' economic growth (these weights may be updated year to year in a transparent fashion). The commodities will consist of internationally traded homogeneous goods, that are cheaply stored, and easily rated in terms of quality (e.g Durum wheat US grade No.2). Most likely they are commodities that are already traded on international commodity futures exchanges and stored at exchanges located near the place of production.

1) An ICC would encourage production of mono-culture crops.

This criticism is correct in that the role of the ICC is to stabilize and promote international traded commodities. Producers will prefer to grow one of the crops that is included in the basket rather than outside the basket, to the extent that the market for in-basket commodities is more liquid. However, since commodities are substitutable, even out-of-basket grains will have their prices stabilized relative to in-basket grains. If an ICC promotes more trade due to stable prices, this will promote investment in cash crops for export.

An ICC does not stop governments from subsidizing their own national choices. For example, if there were individual buffer stocks, and the selling price of the buffer stock was set at the marginally efficient producer, then governments that chose to subsidize mono-culture crops would have to bear the burden of those costs by raising taxes on its own nation, rather than have such production depress international prices and burden producers in developing countries.

In an index, excess production by rogue states can still depress prices and may even raise prices of the other commodities in the basket if the ICC is forced to buy.

2) An ICC reinforces the old colonial system where developing countries produce the raw materials which are sent to the developed countries to produce manufactured goods with higher returns.

Nicholas Kaldor [[14]] along with many other development economists [[15]] argue that agrarian reform and investment in agriculture is essential to industrialization and the reduction of agriculture as a percentage of ones economy. This policy does not promote commodity dependence on exports. Rather it encourages a stable income for commodity exports such that countries can avoid the commodity curse and rely on this surplus to import capital and transform into an industrialized country.

3) An ICC would distort commodity prices and ultimately create a surplus of commodities that would later have to be destroyed.

Knowing where to set the price has been solved with either of two methods. Kahn and at Keynes preferred individual international commodity buffer stocks where experts in the field would manage the buffer stock in order to 'curb irresponsible movement of the price rather than establish stability within a narrow range of fluctuations' [[16]] . Kahn had no stated corridor and the size of the buffer stock would be kept secret. The management would have free discretionary powers to avoid speculators betting against it, and to manage its presumably limited funds to its best advantage. The only rule would be to 'sell early [when prices rise] and buy late [when prices fall]' which maximizes efficiency of the buffer stock and is different from private speculators who are concerned with short term profits and tend to buy early when prices start to rise and sell early when prices start to fall. The buffer stock manager would take a long view and would need their own assessment of the 'normal' price working to carry surplus stocks that are ready to hamper extreme price movements. Financing for these buffer stocks would have come by issuing loans collateralized by the stocks.

While the buffer stock was not a panacea, and there may have been times that the stockpile would be depleted, it is unlikely it would create an excess since the purpose of the buffer stock was to protect consumers from high prices and eliminate marginal producers who required prices above the marginally efficient price to stay in business.

Graham and Kaldor were much more open to non-discretionary transparent policies where an index would be stabilized at a preannounced level (perhaps based on the average of the past 10 years of prices). By stabilizing the index to a peg, individual commodity prices would be free to fluctuate in accordance with market supply and demand, thus precision on the 'fundamental long run equilibrium' index was not so important. Open market operations by the ICC run by technocrats would entail buying and selling the basket, selecting the commodities, and setting the weights in accordance to some objective measure.

The purpose of the buffer stock is to create aggregate demand during a slump by paying producers directly. This would create additional employment and purchasing power in the production of primary commodities have a multiplier effect to add employment and trade activity in other lines, promoting growth and using the ready reserves of raw materials accumulated over the slump by the ICC.

Rather than destruction or restriction of production, these proposals come from a view that economic growth is needed to absorb the commodities, destruction which is complete madness.

Raw materials, even if in abundance, should be considered an international treasure rather than a burden.

To make this growth more 'green' renewable commodities, or sustainably produced commodities could be specified as a minimum percent of the basket.

4) An exorbitant amount of commodities would need to be stored to stop speculators from betting against and breaking the 'bank,' during rising commodity prices.

If the ICC pegs the price or index too low, then there is a chance that speculators may be on the right side of history and break the ICC, in that it runs out of buffer stocks. In such a case there will be run on the CRC. However, if the CRC is full backed, the real value of the CRC will remain the same basket as promised. Thus while the ICC might run out of commodities, it will simply cease to operate in a period of rising commodity prices and the market will reinstate its dominance in setting the price. The CRC up until that point will still have been beneficial to price stabilization.

5) The cost of storage is expensive and needs to be financed through taxes on countries.

The ICC can issue a fiduciary (unbacked) amount of CRC and in the process pay for other assets or expenses. Another method is that a tax could be charged on all countries that hold CRC reserves. This is like a negative interest rate that helps pay for the storage of the commodities (just like storing gold incurs a cost rather than a positive interest rate) and it also limits hoarding of the CRC. However, hoarding in our model is not a cause of global imbalances because for each creation of a CRC rather than debt being the flip side of this creation it is an actual asset, and income to producers. This means that the money multiplier is tied to a consumption multiplier and should have a strong counter cyclical effect on international demand.

6) Stabilizing an index does not stabilize individual prices

This criticism needs further research. It is no doubt that the stabilization of an index, will lead to a more complicated price transmission than the one we state here. Cross substitution and cross price elasticities will mean that there is no simple way of knowing what will occur. However, if commodities are positively correlated due to persistent common shocks then the ICC stabilizing an index will tend to stabilize individual prices. If individual prices are idiosyncratic and not correlated, then the ICC should let private inventories stabilize these price movements as much as possible. By giving extra liquidity to inventories by being a buyer of last resort, the cost of private inventories should go down, and private entities will be more willing to hold individual commodity inventories to buy and sell in a stabilizing manner, if individual instability is prevalent.

If growth is balanced, that is input ratios remain steady, then stabilizing an index will stabilize prices and support growth at the same time.

7) Such a proposal is not politically viable

This bold plan for a reserve currency backed by commodities has been proposed before and while it has had eminent economists in favor of it, it required more imagination than was possible.

The ideology of free markets took over in the 1980s and led to deregulation and dismantling of price boards and commodity programs. We have not seen great stability in commodity prices nor significant development and industrialization of countries that depend on commodities for export with this deregulation. Instead, we saw a growing number of countries becoming dependent on commodity imports, especially food imports. It could be said that the current system has not

worked. Commodity prices are much more volatile now than they were under Bretton Woods, and not valued as highly as they should be.

I treat this topic as one of social learning, and so did Keynes. In his support for a new international currency that was indexed to a basket of commodities (a tabular standard) he said:

"I have no quarrel with a tabular standard as being intrinsically more sensible than gold. My own sympathies have always fallen that way. I hope the world will come to some version of it some time. But ... the right way to approach the tabular standard is to evolve a technique and to accustom men's minds to the idea through international buffer stocks. When we have thoroughly mastered the technique of these, which is sufficiently difficult without the further complications of the tabular standard and the oppositions and prejudices which this must overcome, it will be time enough to think again" (Keynes 1944, 429-430) [[17]].

There should be greater discussion on commodity buffer stocks – be they private, national or supranational - especially in a world threatened by global warming and extreme weather patterns. Even when long term market prices are desired, the ruthless actions of markets on short term even transitory events must be steadied.

Endnotes

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42. Isin Tellioglu, FAO, Egypt

Me, with Mr. Mohamed Aw-Dahir, would like to share our insights from the Near Eastern and North African Region below:

1. **From your knowledge and experience how have trade agreements and rules affected the 4 dimensions of food security (availability, access, utilization, stability)?**

Trade agreements govern the ability to export-- the ability to earn foreign exchange which can be used to finance food imports-- and the ability to import. At global level, probably the most important contribution of the trade agreements and rules to food security is the increased access to markets (and thus, increased availability of food) through bilateral/regional/multilateral agreements. Agreements are designed to keep farm and non-farm trade barriers falling, to encourage the secure flow of international investments, which might in turn increase agricultural development and self-sufficiency. Another benefit of transparent global trade regime is the improved access to low cost food markets by the world's poor.

The Near Eastern and North African (NENA) region which is highly dependent on international market imports for about 60 percent of its food needs to cover the domestic requirement/consumption needs. Most of the countries in the region are therefore vulnerable to food price shocks and projections indicate that their vulnerability will increase. Such vulnerability/their food security can be improved by more effectively mitigating the effects of cereal price and quantity risks which is dictated by international markets/trade agreements and rules. Market and trade agreements are therefore crucial to ease and to stabilize food import flows from net exporter countries to NENA region. It is very important to note that the interconnected markets created by global trade have created not just new strengths but also weaknesses that have jeopardized food security as in the case of global food price spikes (in 2007-08 and 2011). With the food price volatility at international markets, export bans, export taxes, domestic production subsidies and other forms of trade distortions the ability of the countries in the region to sustain food security through imports faced serious challenges, as witnessed during 2007-08 and lately in 2011 food price spikes. In North African countries, the wheat import bill has increased by 62 to 178 percent during 2006–08.

The trade barriers imposed by the net exporting countries affected all dimensions of food security, especially availability, access and stability at market and household levels. For instance, in 2007 the impact of price shocks on food security has been very negative for a number of countries in the Arab region. Food price inflation stemming from global commodity price shocks in 2007-08 has been associated with an additional 4 million undernourished people in this region. Similarly in the year leading up to the Arab Spring, food prices rose by an estimated 13 percent and 20 percent in Syria and Egypt, respectively. The cost of a typical household food basket in Egypt rose by almost 50 percent over the 2005-08 period leading to a lower living standard and increased poverty level.

Food exporting countries reacted to seasonal shortages of production by issuing export bans, export taxes, domestic production subsidies and other forms of trade distortions to keep the available produce at home. For instance, the Russian Federation, one of the leading grain exporters to the NENA region, banned exports altogether when faced with shortages, leading to social unrest in selected NENA countries, as consumers could not afford higher food prices due to lack of supply in the global markets. More studies support the hypothesis that social unrests in NENA countries are due higher food prices when confronted with limited global supply (due distorted trade), rather than fuelled by political motives. These periods led some of the NENA countries to implement short term food security policies in uncoordinated manner. Some of these policies were however negating each other and were sometimes costly and to the expenses of the long term development/investment needed in food security.

2. What is your knowledge and experience with creating coherence between food security measures and trade rules? Can rights-based approaches play a role?

Trade rules set by WTO intended to facilitate negotiations for fair trade agreements. Given the prevalence of poverty and hunger, direct and well targeted safety nets and social protection programs based on legal guarantees and solid entitlement would improve food security. As a result of high food prices of the 2007-08 and 2011, the poor people in NENA region had an inadequate intake of essential nutrients which would seem to reinforce the deterioration of food insecurity. Given this dramatic experience, forthcoming trade rules are expected to be re-designed allowing enough flexibility and resilience to 'right to food' even under extreme market situations as in the case of 2007-08 crisis.

Any trade policy violating the right of food is expected not to be pursued both by the developed and less developed countries/regions of the world. With a common objective of maintaining their right to food, net food importing states, particularly in the NENA region,developed partnerships with other net food importing countries.

3. How can a food security strategy, including components that explicitly support small-scale farmers in agro-biodiverse settings, be implemented in ways that might be compatible with a global market-based approach to food security?

The foremost motivation for farmers to produce-- regardless of their scale of production-- is the existence of markets to sell their produce: Even if a local farmer is not selling its produce 'literally' in the global market place, his/her production may still be marketed in global terms, i.e., it can reach to consumers buying in foreign markets through the so called 'intermediaries' in the value chain. The rules governing the different aspects of value chain development are increasingly integrated in trade agreements, carrying implications for marketing opportunities and productivity in turn.

In order to diversify marketing opportunities for their produce, farmers need to adapt to specific requirements in different destination markets, generally reflected in the form of quality and safety standards. Smallholder productivity growth and increased market integration is critical to meeting increased demands; increased investment in food systems is crucial.

Sometimes, to optimize their earnings, farmers might find it rational to store and introduce their harvests later in markets. Improving the conditions of storage, distribution and transportation facilities, increasing compatibility of the product with destination market requirements (including the compatibility of post farm activities like packaging, labelling, etc.), can support building chains of supply that would sustain foreign exchange flows in the country, as well as increasing production and lowering prices for local consumption.

NENA region can be a well selected candidate for all the improvements in different parts of the supply chains stated in earlier paragraphs. According to FAO, the amount of food that is lost or wasted is almost 250 kg/ person per year in the NENA region. All food wasted/lost is a contribution

towards more-defined food insecurity. The urgent need to consider small scale farmers' welfare while defining the effects of global trade mechanisms on the economic environment is much more evident in the NENA region. In the region, an average of 73 percent of all farms are 'small farms', whereas the same share is only 32 percent in Europe.

Measures supporting food insecure countries needs to be adopted not only domestic but also at the global level to be effective-- Even if a country has taken all the domestic measures explained in the previous paragraphs and is able to increase its production, it might not attain a food secure-state if its farmers cannot compete in world markets given the financial ability of destination countries' in supporting their own farmers-- resulting in a trade system which does not depend on comparative advantage, but the financial reserves of the country, thus, biased towards High Income Countries.

43. Robert Vincin, Emission Trading Association Australia Ltd, Australia

The cornerstone of modern society over the past 340 years has been financial banking, reflecting, the more you have, the more you contribute. The reality is contributing to the financial bank has actually drawn upon, close to the point of no return, the cornerstone Bank of Assets of mankind and all living matter Soil-Water-Vegetation-Atmosphere (SWVA).

Reality is, every aspect of our daily lives, directly and indirectly, we are drawing upon SWVA and have done so at the start of industrial revolution. It is now mandatory that, we view all forms of financial banking income be correlated to, the drawing-down of the bank of assets (SWVA). Be it mining-petroleum-fracking, forestry harvesting, power generation, manufacturing transport include airlines, & farming drawing the carbon and elements from the soil into food on the table.

Based on my decades involved in lecturing and growing soil, soil-carbon and elements in deserts viewing firsthand anthropogenic poverty on all continents clearly a new global accounting balancing protocol is demanded.

Clearly scientifically proven SWVA is in overdraft. If we are to return the planet in full working order to the historians of tomorrow (who indeed have their pens poised) we need to act to avert the receiver Nature imposing serious hardships.

Based on hands on experience reversing deserts to grow soil food and fodder with dedicated vegetation sequesters mass volumes of CO2e and via the root systems manure become soil, soil-carbon and elements. Well planned and design under UNFCCC emissions all of the above can be offset at low to zero cost. Applying financial accounting terms meeting of the UNFCCC 100 year secure storage of CO2 the income outweighs all the profit of all the above.

Addressing Climate Change is the greatest business opportunity ever and it is perpetual. Bottom line well planned there is more returns saving the Planet than stripping it!

Robert Vincin

Australia

44. Bookie Ezeomah, Royal Agricultural University, United Kingdom

In response to a question from Mr. Bennett's presentation "How is what is grown determined so that diversity, including dietary diversity, is encouraged and how does this approach ensure that food gets to the hungriest regions"?

A major concern for me is Land grabbing and foreign direct investment in Africa and the effect it has on trade and the local African markets. Super economies (e.g China) have acquired large expanse of land in Africa to produce food for their increasing population. This has fostered growth of large scale monocultures to the detriment of small holders and their small scale mixed farming model. By exporting food produced in Africa to China for example, valuable resources are exploited such as water and nutrients, and tress cut down in land preparation have increase green house gas accumulation in these areas. How are small holders protected from the adverse effects emanating from large scale farms such as ground water pollution from fertilizers and other agro-chemicals? Foreign direct investment and trade policies should include agreements such that at least 10% of land purchased in another country (especially developing economies) is dedicated to growing indigenous varieties of local food which will be sold in local market at appropriate market prices (which will not compete with ongoing prices) to support food security. These companies should be encouraged to invest in research and propagation of these local varieties as a social service. It is also the duty of governments to maintain seed banks and preserve genetic diversity of indigenous food.

45. Andrew MacMillan, Formerly FAO, Italy

Dear Friends,

I have been hesitating to comment on this theme. It interests me very much but I also know just how little I understand about international trade in agricultural products. I will, however, make a few short observations based more on intuition than on any in-depth knowledge of the subject.

1. The rules that have painfully emerged from long-drawn out GATT and then WTO negotiations are generally benign (especially from the perspective of improving efficiency), but the manoeuvring in which nations and regional groups quickly engage following agreements prevents the achievement of their intended purposes. Thus, for example, the farm subsidy bill of the OECD countries has continued to rise (to US$415 billion in 2012): adjustments have been introduced in the purposes for which payments are made so as to conform with WTO requirements, but with the same ultimate effect of lowering food prices for consumers and producers within the rich countries – and with knock on effects on international markets. Witness also the abusive use of non-tariff barriers for protection of national agricultural products and the selective application of food import/export sanctions in the context of international political disputes (e.g. EU-Russia).

2. Most governments implicitly favour policies that keep food prices low for consumers, claiming that this enables the poor and hungry to have easier access to food. A blind eye tends to be turned to the conditions of work endured by people working in the food chain and to the low incentives such policies offer for new investment in farming. The result of these policies may be to increase rural deprivation and hunger. Interestingly, when prices rose in 2007-08 and 2011, the medium-long term effect was to reduce poverty (both rural and urban) in developing countries (see Headey, D., Food Prices and Poverty in the Long Run, IFPRI, 2014).

3. "Conventional" food policies tend to reinforce the asymmetries which already exist in commercial food marketing systems (both national and international). They effectively subsidise all consumers (encouraging over-consumption and waste), rather than benefit poor families who need better access to food – an issue best addressed through social security programmes, freeing up subsidy funds to provide farmers with incentives to adopt sustainable production systems..

4. It is most unlikely that the handful of international corporations that dominates the international trade of each of the major food commodities is in any way committed to improving human nutrition or food security. The fact that several of these same corporations also dominate the international trade in farm inputs implies that their interests are in extending input-intensive agriculture at a time when the shift to genuinely sustainable production systems based on harnessing agro-ecology-driven processes is urgently needed on environmental and climate change grounds.

5. While it would be wrong to blame the current trading rules and systems for the fact that more than half the world's population are malnourished (800 million chronically hungry; 1.5 billion overweight or obese and rising fast; probably 2 billion with micronutrient deficiency), they certainly don't help matters. From a global perspective, it would seem to be extraordinarily rash to perpetuate a system in which the food and farm input trade which plays such a fundamental role in the health and survival of the world's population as well as the health of natural resources is in the hands of what amounts to a privately run cartel, whose members are largely above the law and not accountable to any national or international authorities.

6. The lack of apparent concern about an issue of such massive significance for the human race is perplexing. To the extent that there is concern, it is exemplified by the fair trade movement and some certification schemes through which consumers who are conscious of the inequities and environmental risks inherent in the current system seek to bypass it, but these still account for only a small proportion of traded food products.

7. We have been fortunate, since the end of World War 2 to have been able to meet the food needs of a rapidly growing population, thanks, in part, to the globalisation of the food market and the uptake of input-intensive farming. But the need now is to translate ample food availability into healthy eating by all people and to shift food production and consumption onto a truly sustainable basis. This can only be achieved by the emergence of strong institutions that are able to exert themselves in the global public interest.

8. Worryingly, there is little appetite for moves in this direction. We easily forget that, partly because of the absence of such a capacity, 258,000 fellow humans died in Somalia just 4 years ago for lack of food, in a world with more than enough food for all to eat well – and waste much of what has been produced. We must not wait for a truly catastrophic global food shortage to force us to face up to the need for global institutions empowered to shape the ways in which our food systems are managed in the global rather than private interest.

Best wishes,

Andrew

46. Jasmin Marston, Freiburg University , Germany

Thank you to the facilitators for raising such interesting questions, as well as to the many insightful commentators. As many important arguments have already been made, I would like to simply add a historic perspective, as well as highlight some aspects I feel have not yet been highlighted.

The salubriousness of international 'free' trade for developing (and often food insecure) nations has been questions by 'experts' within the International Community as early as 1950s, when the GATT economists investigated the 'disturbing elements of agricultural protectionism' (Trends in International Trade, GATT, 1958, also known as the Haberler Report)

The agricultural subsidies of developed countries, that the 'Haberler Report' identified as pernicious for trade of developing countries have declined since then, e.g. in the European Community from about 70% of the budget (in the 1960s) to around 40% in recent years. Yet the negotiation rounds, such as Uruguay or Doha, have still not allowed for a realignment towards a fairer trade regime in the sector.

Theories which govern world trade, and its arising inequalities, have been contested by a number of internationally respected economist since then as well, e.g. Raúl Prebisch (in the 70s), Joseph Stiglitz and Ha-Joon Chang (recent years), arguing that we should learn from history and allow a' fairer' trading system (also note the excellent resource pointed to by the facilitators: Jennifer Clapp's “Linkages of 'Trade Liberalization and Food Security”, 2014, for an overview on issues of underlying economic theories).

Dumping surplus production as 'food aid' has slowed since its apexes of the1980s, but continued until just recently by the US, e.g. in the West of the DRC, where I was able to see how US AID rice undermined local production as recent as 2013.

Trade liberalizing agreements are not the only culprit undermining food security, particularly in Sub-Saharan Africa, which is still suffering from the highest prevalence of undernourishment worldwide.

Political will must be examined as well. My experience in the DRC has strengthened this conviction, as well as the need for political stability. Nevertheless, the aforementioned public investment (by other commentators) are direly needed (such as infrastructure, storage facilities, market price information systems, education etc.), and Least Developed Countries, in theory are not hindered by the WTO 10% de minimis clause, yet many LDC countries have not even reached this low threshold. Considering the high percentage of its population relying on agriculture for their livelihoods (and despite the CAADP - Comprehensive Africa Agriculture Development Programme, initiated by the AU) this development should be questioned from a political will perspective also.

Understanding and involving local small scale farmers, which will play a vital role for insuring food security (see Olivere De Schuetter for excellent reports on the subject), have been neglected by local and international policy makers and influencers alike (Governments, aid agencies and NGOs etc.)

Second to last I would like to caution against an over-emphasis on production to eradicate food insecurity without acknowledging the effects industrial agriculture has had on the soils as well as biodiversity in countries using a surfeit of chemical pesticides and fertilizers since WWII. Based on FAO reports 1/3 of soils are already 'severely depleted', so to ensure sustainability nature needs a seat at the negotiation table. Furthermore the IPCC (2007) report pointed to the thus far neglected

potential for soil carbon sequestration through sustainable farming methods, slowing down climate change.

Last but not least, I would like to draw attention to the power of consumers of the north, of which I am currently one myself, and know quiet a few personally. Here the vote for certain shapes, colors and prices happen every day, often in favor of fruits and vegetables produced unsustainably. The understanding and importance of the farmer in our societies has almost disappeared, and while the large-scale producers are continued to be supported (mostly due to powerful lobbyism) the small scale farmer is choked and disappeared across Europe and the United States also.

Questioning the currently economic paradigms underlying our free trade regime is important, but I would argue, it is just one of multiple steps we must take to ensure long term food security.

47. Botir Dosov, ICARDA-CAC / CACAARI, Uzbekistan

Linking Agricultural Research for Development (AR4D) to Extension and Advisory Services (EAS) to support food security and access to agricultural markets

The consequences of climate change have a negative impact on agriculture and rural and vulnerable population, which has already been affected by the severe outcomes of the recent global economic crisis. Since the recent food and financial crises, the prices of nearly every agricultural commodity have risen sharply, in a process which does not seem to have peaked yet. Several factors contributed to these price increases: increasing frequency and severity of droughts, rising energy prices and subsidized bio-fuel production, income and population growth, and market and trade policies that had a distorting effect. Poor people spend 50–70 percent of their income on food. Because wages for unskilled labor tend not to rise in line with food inflation, the poor have little capacity to adapt as prices rise. Moreover, even before the recent food crisis, the poorest of the poor were being left behind. Relevant coordinated interventions are needed to address production and productivity through policy and institutional innovations, improved markets and market linkages for smallholder agriculture.

Considering these challenges, CGIAR[1] Research Programs together with National Agricultural Research Systems and Rural Advisory Services joined efforts and set as primary objectives addressing the issues in order to improve agricultural productivity, increase the quality and quantity of food through intensification and diversification of sustainable agriculture and to develop the knowledge for the efficient use of natural resources, mitigating the negative impact of the consequences of climate change. A priority cross-cutting issue is addressing the needs of vulnerable and low income groups minimising projected adverse effects of the above mentioned threats.

Joint efforts of Agricultural Research Systems and Rural Advisory Services are focused on four main goals of regional development:

1. Improving the well-being of the rural population, particularly vulnerable groups and those dependent on agriculture;
2. Guaranteed improvement of the quality and quantity of nutritious food through the intensification and diversification of agriculture;
3. Rational use of natural resources;
4. Mitigating adverse effects of climate change.

The Strategies of agricultural research and innovation for future with food security stipulate an integrated approach based on (i) need for an integrated regional agricultural policies aimed at

achieving the above goals; (ii) the opportunities for bigger impact by strengthening cooperation between national research institutions and multi-stakeholder regional centers and institutions in the field of agricultural research, innovation and education to facilitate actions for development along agricultural production and food chains; (iii) the implementation of collective actions to overcome the common problems at the regional level, such as trans-boundary diseases, use of natural (water, land) resources, and (iv) the further improvement of food security policy, providing for the development and integration of regional markets, enhancement in trade and commercial relations and modernization of communication infrastructure, and others.

Currently the CGIAR has developed strong research competencies in:

- Improvement of crop and animal production for commodities of importance to the poor;
- natural resource management for sustainable agriculture, including conservation and improved use of water, soils and forests; and
- social sciences and policy research which benefit the poor through improving access to agricultural resources, food and markets.

Agricultural growth through improved productivity, markets and incomes has shown to be a particularly effective contributor to reducing poverty especially in the initial stages of development. Good practices and research are critical for fostering the positive change in policies, governance arrangement and market systems to allow agriculture fully contributing to poverty reduction and development. As society and environment are constantly changing and interconnected a reconsideration of formerly proven principles are required. For instance, climate change shifts the parameters for crop yield improvement, policies promote socio-political dynamics, institutions and markets promote greater equity and environmental protection, and increasing agricultural productivity is critical to meet the needs of rising populations.

Reducing rural poverty and improving food security are conjunctive and require studies to develop and validate specific agricultural investments appropriate to different agrarian economies. Such research would involve a range of integrated components, including improving varieties of crops and livestock, restoration of degraded natural resources and improved value chains and markets. Outcomes of such interventions would be applicable for out-scaling the capacity for sustainable intensification of production with improved stability of yield and resilience to shocks, as well as improved household food security, increased stability of production and resilience to shocks and increased income from farm and non-farm activities, permitting investment in health, education and other poverty-reducing activities.

Improving food security and nutrition requires studies to develop and validate agricultural investments appropriate to high potential areas, including studies on improvement of crop and livestock productivity, a sustainable provision of natural resources which anticipates climate change, and improvements in policies on markets and trade which help to reduce and stabilize prices. Changing levels of production, price and access to affordable food by the urban and rural poor are considered as proper indicators of those interventions.

Creating effective mechanisms of delivering nutrient-rich foods to vulnerable groups, particularly those nutrients essential to growth and development of children is critical as well to cost-effective targeting of multi-stakeholders interventions. These may range from increasing the nutritional value and safety of relatively more available, staple foods, to increasing production and consumption of foods rich in micronutrients, particularly animal products, vegetables and fruit, through local agricultural diversification and improved market chains. There is a need for more evidence on where and how local improvements in agriculture lead to reduced undernutrition. For today, many programs on food supplementation and fortification have evidences of addressing undernutrition, but are rarely linked to local agricultural production which could present opportunities for agricultural improvement and sustained access to nutritional foods. Because of

the critical importance of women in child nutrition, understanding and enhancing their role in the production and distribution of food at the household level must be an essential part of any strategy to reduce undernutrition.

Market driven changes, particularly in food security, should involve different institutional arrangements in generating outcomes of coordinated interventions, especially with the private sector, which play critical role in the supply of genetic technologies and seeds, agrochemicals, veterinary products, agricultural machinery and implements, and even human nutrition. This role will continue to grow as the cost of biotechnology applications continues to fall, intellectual protection instruments become more standard and input and service markets consolidate. Multinational and national input supply firms are focused mostly on the commercial agriculture sector where the market and institutional conditions are present to ensure suitable rates of return for their investments, and this will continue to be so for quite some time. However, their up-stream domains will have an increasingly wider application scope and this will open up important partnering opportunities with public entities –both national and international – that have downstream capacities across different crops and agro-ecological environments.

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[1] Consultative Group of International Agricultural ReSearch

48. Dennis Bennett, AfriGrains, Inc, United States of America

Land: Impact FDIs vs "100% Exporters"

Ms. Bookie Ezeomah's questions about land-grabbing and the potential negative effects of FDI (Foreign Direct Investments) on trade and local African markets is important to the discussion of trade policy & food security.

There are at least three immediate negative impacts of FDI and foreign acquisition of farmland that one must be careful to avoid: 1) acquiring land rights from the national government without permission from the local tribal owners; 2) selling (or giving away) food that drives down the local price of food; and 3) producing food purely for export to the home country, effectively removing (potential) farmland assets from providing food security for local population. Additionally, there are the negative longer-term environmental effects of water usage, pollution, and mono-farming.

First, permission to farm land should be negotiated at both the national and local level, customized to each individual countries unique structure and tribal culture. This is more complex, but would avoid much of the abuses we have seen from many African land grabs. Essentially, the private company should conduct themselves as a citizen of both the national government and the local tribe and village region. Local partnership is crucial to success.

Bottom line, unless the investors behind the FDI are Impact Investors, or Social Investors, where the goal is to both make a return on capital while positively affecting the holistic food value chain, it is very difficult to achieve this "human rights" and "positive local citizenship" goal.

A second, more rare situation is where FDI is adversely affecting local food prices by flooding local markets with too much food. Most FDI cannot afford that luxury, even if they are Impact Investors. However, it does occasionally happen, where food surplus is so high that it drives down prices temporarily and causes famers to stop growing surplus food. One solution which we are using to avoid this affect is to purchase surplus grain from local farmers, and add that to our Food Value Chain. We are actually encouraging local farmers to produce surplus grain that we will purchase, store, transport and sell, just as a farmer cooperative would - but on a larger scale. Our pilot test of this approach nearly doubled local food production in a single year, as the farmers were confident

they had a willing buyer of their surplus grain. BTW, the farmers used the same inputs and their traditional farming methods, yet doubled their production.

The worst situation, in my opinion, is where the FDI acquires (vacant or otherwise) farmland with the express goal of producing food for export to the home country. Currently, there are FDI investors from China, India, and the Mideast who are seeking as much farmland as possible in order to produce food solely for export to their home markets. In five years, if these projects are approved and implemented, the amount of "available" farmland necessary to feed local populations will be significantly reduced. It is quite possible to have a situation where local farm production is high, but the local population are food deficit/food insecure because FDI food production is exported without the possibility of local sales.

There are multiple ways to restrict or inhibit the "100% export" FDI from acquiring (vacant or otherwise) farmland. Insisting on both national and local permission to farm, a percentage of local ownership, and due diligence of potential FDIs are some of the approaches that could be utilized. Restricting exports to a percentage of the total is also possible, but more difficult to craft in legal language that encourages FDI while protecting local food security. Again, Impact FDI are less of a concern in this, because it would be unusual for them to be acquiring land for 100% export.

Much of the negative environmental effects Ms. Ezeomah and others have mentioned should be able to be avoided with Impact FDI's, as opposed to the "100% Export" FDIs. FDIs that are serious about good local citizenship will by definition be sustainable, and long-term stewards of the land, people and resources. Often the 100% Exporters are solely interested in local land exploitation, to the detriment of the local people and eco-system.

This issue of sustainability and good local citizenship is going to become even more important as countries with large wealth funds and foreign currency reserves seek to acquire land resources in Africa primary to secure scarce African farmland resources. Some have observed that this is similar to the colonial rush for mining resources, or the rush for oil, which is then restricted to the foreign owners sole benefit. The 2015 SDGs should help address these concerns, but the international trade and food security negotiations around this issue are going to be "challenging".

Dennis Bennett

CEO, AfriGrains

49. Kien Nguyen Van, Viet Nam

Hi everyone,

I think this is an interesting topic for discussion. However, I am not sure there is any expert could share their experience in this issue because we are talking to the future after trade agreements related to food security.

In my opinions, term of food security is also under top national security of any country. Therefore, every country will have their national strategy to ensure their food security under trade agreements. Maybe developed country will focus on technology and science as well as environment friendly production practices to increase value of food and standard from low cost. Whereas, developing countries will have to face to great issues such as seedling, technology, administration, legal and sustainable environment. All of them will make food in developing countries will higher than at developed countries. But in earlier stage it will be supported by cheap cost of natural resources and environmental use. After this time, price of food will increase fast and high in these countries because cheap cost also go together with not sustainability.

In general, the linkage in earlier time will affect actively to four dimensions for global consumers and producers both but long term will be great challenges to consumers and producers in developing countries. Then, we hope that international institutions and developing countries should prepare/develop suitable strategies/ approaches in the future. Specially, in beginning of trade agreements to exploit/attract and use effectively the investment flows to escape the trap of the trades.

I am sure that globalization is an indispensable orientation of history that help use every source in the most safety but it also requires acceptance from members.

Best regards,

KIEN

50. Ann Steensland, Global Harvest Initiative, United States of America

Dear Susan,

Thank you for your response to the posting from Global Harvest Initiative (GHI) and the Inter-American Development Bank (IICA). We agree that a richer, more nuanced conversation about the linkages between trade and food security is essential if we are to maximize the benefits, and reduce the risks, of global and regional trade, particularly for smaller and medium scale producers.

The Rome Declaration on Nutrition (ICN2, 2014) recognizes that the "root causes of and factors leading to malnutrition are complex and multidimensional" and identifies "poverty, underdevelopment and low socio-economic status [as] major contributors to malnutrition in both rural and urban areas." (Pg. 1, 5 and 5.a.) The Declaration emphasizes that raising the productive capacity, income, and resilience of small producers, especially women, plays an "important role in reducing malnutrition." (Page 4, 14.f.) Trade cannot address all of the socio-economic and political challenges that influence food security and nutrition, but trade creates opportunities for small scale producers to increase their incomes – a critical component of increasing food security and reducing malnutrition.

One example comes from the International Fund for Agricultural Development (IFAD) which facilitates a public-private partnership designed to help smallholders cocoa producers expand exports of dried cocoa beans certified as very organic and fair trade. (Full project description attached.) Sao Tome and Principe is home to one of the rarest and most expensive cocoa beans on the market, but the cocoa price crash of 1998 devastated the local cocoa industry. In 2003, IFAD facilitated a partnership between 500 farmers in 14 communities and Kaoka, a leading French organic chocolate producer, who agreed to purchase all the organic-certified cocoa that the farmers could produce and provide technical and commercial advice. Thanks to the project, known as PAPAFPA (Participator Smallholder Agriculture and Artisanal Fisheries Development Programme), smallholder cocoa producers have resumed cultivation and organized themselves into associations and cooperatives.

The result, both in terms of productivity and incomes, has been dramatic. Export of cocoa has increased from 50 to 900+ tons in just ten years (2003-2013). Producers now sell their cocoa for more than double the price, they have a stable set of buyers for their product, and incomes have

increased fivefold. The benefits of the revitalized cocoa value chain spread beyond the original participants in the project. "Thanks to IFAD and its partners, nearly 2,200 farmers have enhanced their living conditions and strengthened food security by growing cocoa certified as organic and fair trade." (IFAD Rural Poverty Portal.) The increased income has allowed families to invest in home improvements, such as generators and refrigerators, while the producer associations have invested in community health care centers and sanitation projects. All of these investments enable and encourage good nutrition.

One of the biggest believers in the potential for trade to improve food security and reduce poverty is Ambassador Darci Vetter, U.S. Chief Agriculture Trade Negotiator. At a recent event hosted by the Global Harvest Initiative in Washington D.C., Ambassador Vetter said, "Good trade policy is good food security policy." She described the goal of trade as providing more people with access to more nutrient rich foods, while increasing farmer income and reducing the environmental footprint of agriculture. The key, said Ambassador Vetter, is to listen to markets. "Export bans, refusing to let products leave creates disincentives for the farmers. Some of the highest tariffs that we see are among and between countries that…are producing staple crops that their neighbors need but [the farmers] can't get them to market." Meanwhile, highly subsidized production "creates overproduction that perhaps the land and water cannot support," she said.

In order to maximize the opportunity for trade to increase food security and nutrition, particularly for small scale producers, value chain development and market access initiatives need to be supported by policies and programs that promote women's social and economic empowerment, provide nutrition and financial education, improve food storage and safety, and stimulate the market for affordable, nutrient rich foods. Measuring the direct impacts of trade on food security and diets can be challenging (as Ruth Campbell of ACDI/VOCA describes in her submission.) Nonetheless, the current success and future potential for local, regional, and global trade to increase incomes, expand access to affordable nutritious food, and improve the socio-economic status of women means that trade is a critical tool in meeting the imperative to reduce global poverty, hunger, and malnutrition.

Ann Steensland

Senior Policy Associate, Global Harvest Initiative

51. Emile Houngbo, Ecole Nationale Supérieure des Sciences et Techniques Agronomiques de Kétou, Benin

[*French version*]

Le commerce des produits agricoles est indispensable pour relier les zones excédentaires et les zones déficitaires de produits agricoles. Le transfert des excédents de produits agricoles vers les zones où la demande n'est pas encore couverte est très important pour optimiser l'utilisation de la production agricole disponible, éviter le gaspillage et permettre à toute zone ou tout pays de se concentrer sur la production de spéculations agricoles qui lui procurent des avantages comparatifs. Cette conception a fait notamment l'objet de la théorie de l'avantage comparatif de l'Economiste classique David RICARDO (1772-1823). Cette théorie stipule que « chaque pays a intérêt à se spécialiser dans la production du ou des biens pour lesquels il dispose d'un avantage comparatif par rapport aux autres pays et à acheter les biens qu'il n'a pas produits ». C'est une théorie en

faveur d'une division internationale du travail et du libre-échange. La spécialisation de chaque pays permet une économie du facteur travail, favorisant ainsi les gains de productivité et la hausse du volume produit. L'existence même des nations serait fondée sur cette réalité, vu qu'un pays ne peut produire à lui seul tous les produits agricoles dont il a besoin pour la sécurité alimentaire de ses populations. Mais, la théorie suppose implicitement que c'est le surplus de la production dans une zone ou pays qui est exporté vers une zone ou pays déficitaire pour qu'il y ait équilibre. Malheureusement, ce n'est pas souvent le cas. Il est fréquent que les exportations pénalisent même les populations d'une zone excédentaire qui se retrouve finalement avec une disponibilité alimentaire inférieure à la demande, entravant ainsi la sécurité alimentaire. On pourrait parler du phénomène de commerce « pervers » des denrées alimentaires.

[*English version*]

Trade in agricultural products is essential to connect the surplus areas to deficit areas of agricultural products. The transfer of agricultural surpluses to areas where demand is not yet covered is very important to optimize the use of available agricultural production, to avoid waste and to allow any area or country to focus on production of agricultural crops that give it a comparative advantage. This particular design was the subject of the theory of comparative advantage of the classical Economist David RICARDO (1772-1823). This theory states that "each country should specialize in the production of goods for which it has a comparative advantage over other countries and to purchase goods that he has not produced." It is a theory in favor of an international division of labor and free trade. The specialization of each country allows labor economy, promoting productivity gains and higher produced volume. The nations' existence is based on this reality, since no country can produce itself all agricultural products it needs for food security of its people. But the theory implicitly assumes that it is the surplus of production in an area or country that is exported to a deficit area or country for there to be balance. Unfortunately, this is not often the case. Food export even penalizes populations of excess area that ends up with food availability below demand, hindering food security. We could talk about the phenomenon of "perverse" food trade.

52. Juan GarciaCebolla, FAO, Italy

It is difficult to find references to certain topics in discussions on linkages between trade and food security. Probably it is an indicator of the low priority of those topics and the predominance of a paradigm that focus the attention of those that support it but also of those who dislike it. One example is regional integration processes and improvement of trade between neighbor countries, it is almost absent of the discussion. It has different implications in terms of food security: lower diversification and higher exposure to shocks, lack of opportunities for people in border regions, higher dependence on remote providers to balance supply and stocks during crisis…

Regarding to international standards, there are many countries where food safety policies only pay attention to the export sector and some wealthy urban sectors, creating a dual market, a formal one for those who can afford and other informal for local poor, creating in addition barriers that marginalize economically some groups instead of supporting them to strengthen their capacities to meet the standards and be part of the formal economy.

A human rights based approach can help to handle some of the negative externalities of trade on food security, not only for cases related to free trade agreements, also in other areas, promoting empowerment and increasing participation on decision making to balance priorities, including the needs of vulnerable people.

53. Helga Vierich-Drever, Canada

I am very worried about this neoliberal green revolution agenda for African agriculture. I worked for one of the institutes involved in this. As dedicated and sincere all my colleagues at the International Crops Research Institute for the Semi-Arid Tropics were, I found it incredible that they had so little contact with farmers and seemed to accept without question the "failure" of traditional subsistence economies.

This failure is an absolute myth, as I found that the traditional lineage system in Mali and Burkina Faso functioned well as a risk management buffer: many lineage heads had set aside up to eight years grain in the communal welfare bins. I never saw evidence of malnutrition where these systems were intact. trade between different regions, like the indigenous systems of rotating farmer markets, were for spices and commodities of a more specialized nature than the major subsistence crops. Millet and sorghum was produced for basic subsistence needs, and many rural communities still adhered to the traditions that made sale of these crops a shameful and even punishable offence.

Where I saw malnutrition was in the urban slums, and I understand it is common in refugee camps. Malnutrition in Africa is a by product of development "efforts" dating from the displacement of people from much of their best land during the introduction of European stye commercially oriented farms in the colonial period.

There has been enormous change in much of Africa, and much effort has been expended to make life better for people in all the countries which became independent states since the end of the colonial period in the last century. But a lot of damage has been done, certainly much of it unintentionally, in that period, in attempts to provide development assistance.

Traditional rural socio-economic systems, with their organization into lineage's, chiefdoms and clans, have been misunderstood by outsiders. The function of the traditional tribal elites was not about accumulation of wealth. Rather senior councils of village elders and conventions of tribal leadership were, rather, about the entrusting of communal surplus to a respected persons. This was, then, as i mentioned at the outset, about managing risk.

A chief who sold this for personal gain would be stripped of office and was, in the past, executed. It is not a question of a powerful person extracting tribute, it is someone taking on a lot of responsibility, often for specifically generated communal surpluses generated for that purpose. Ranking is directly related to increasing responsibility. Household heads were expected to produce enough to feed their families from year to year, plus they must donate a certain amount to their lineage heads.

Each lineage head has responsibility to store enough to see to most necessary ceremonials within the lineage (marriages, funerals etc), and the chief, often elected from among a council of older lineage heads, was responsible for donations to the communal stores.

In pastoral societies, you get this sort of thing happening also, but it is mainly livestock that the lineage heads and local chiefs accumulate. Theft and counter-raids to recover value are undertaken often, and involve both duplicity and loss of life, Long term risk management is a serious concern in all viable cultures.

The role of young men within these systems is to show themselves worthy of respect. They do this by honouring the responsible heads of their family, their lineages, their clans, and the village chief. Chiefs are elected by a council of elders (lineage heads) and hold authority in the same measure as "our heads sweat with worry", as one village headman told me. Young men compete for honour, and for recognition as people worthy of respect and trust. This is kind of important, since it is the elders who make decisions about allocation of land and livestock from communal resources, and without their favour, a man cannot afford to raise a family.

There was a recent paper published in PNAS, which begins by asserting that warriors have more wives and offspring. The main author of the reported study, however, makes it clear that it is more complicated than that. http://www.pnas.org/content/112/2/348.abstract

"The overriding question I'm interested in is how humans cooperate, and one type of cooperation is participating in intergroup conflict," (Luke Glowacki) explained. "Why do people do things that benefit their group if they have to pay a cost? For the Nyangatom there are no formal institutions governing society, and yet they manage to make a living from one of the toughest landscapes on Earth, and they do that through cooperation."

In fact, he said, cooperation plays a key role in virtually every aspect of Nyangatom life.

"I set out to study who herds together, who digs water holes together, who plants together, and also who participates in conflict events together," he added. "I conducted interviews about the raids, and collected reproductive histories by asking how many wives raiders have, how many children each has had, how many are alive, how many died and how they died."

Glowacki interviewed village elders detailing their history of participation in raids. Analysis of lifetime participation in raids, of 120 men, showed that participation in more raids resulted having higher rank, as well as more wives and more children over the course of their lives.

This is an example of a pastoral society, and it should be noted that most of the raids were not planned as actual armed conflicts between men, they were expeditions to steal cattle or to recover stolen animals. But this is very different form the profit oriented kind of rustling of livestock that is such a problem here in North America, which leads to serious law enforcement headaches. Indeed, while the traditional authority and motivation is intact, the actual violence and lose of life is much less than what happens without traditional systems of authority in place.

Glowacki: "We don't have quantitative data to that effect, but there are some groups in neighboring Kenya where raiders who capture cows in a raid don't have to give them to the elders or they can sell them at a market for money, and the violence is significantly greater" he said. "The Nyangatom have a mechanism that mediates the benefits the warriors receive," he added. "There is a lot of status and privilege that comes with participating in raids -- when you come back to the village, the women are singing and people are parading. They're celebrating you, but you still go home alone."

The fact of being a successful participant in raids is secondary, I think, to the fact of being a person with a good reputation. It is, in a sense, an older and, in evolutionary terms, a much more illuminating aspect of human social behaviour. I found reputation absolutely critical among the forager Kua, in the Kalahari, as well. indicating that where violent confrontations were considered

childish and imprudent, a man's reputation - his character - judged by means of qualities universal in human societies no matter what the economy, still makes a difference. Among the Kua, such men, although they were on the surface, entirely modest characters, never lacked for eager campmates, they always had the largest camps. Even though most hunts were individual affairs, meat was shared - as you can imagine, larger camps had the best supply of meat.
This is because these universally admired qualities - loyalty, diligence, diplomacy, generosity, and a certain shrewd wit - all made such a person sought after by companions, surpassing any claims based merely on genealogical distance or appearance. Honour is a very real thing among men.
The heart of human cooperative life, is a moral weight based on honour. Willingness to contribute to joint ventures is rooted in the same impulse as willingness to share food, and to extend a hand to help a friend.

I would suggest that the ordeals involved in coming of age often subject young people to tests. For young men this involves finding ways to show older men that they were worthy. It depends on the kind of economy, how reputation - the touchstone of respect and support from others - can be won. A focus on increasing farmer income, or income from livestock production, misses this point about cooperative ventures being one important way of gaining reputation. People strive to live up to cultural ideals, and are ranked, formally or informally, in every society, even the most egalitarian. being respected and esteemed by one's companions and elders were usually major factors leading to improved networks of cooperation and long term welfare.
The earning of respect and reputation is closely tied to showing behaviour that benefits the whole community. Human beings are extremely sensitive to the moral parameters involved in achieving honour, and it always has a moral dimension. Justice is rarely served by means dishonest to the interests of the community. Thus people can get personally wealthy but still be widely disparaged as greedy and selfish. Self interest is NOT enough to get you honour.
I think the period of colonial rule was detrimental to these traditional systems, either seeking to make use of chiefs and other local tribal authorities to carry out changes in farming practices intended to create marketable commodities like cacao, coffee, bananas, peanuts, and cotton... or to generate beef and other livestock products for world markets. This has weakened the traditional risk management within these societies, and of course also converted some of the best farmland to production for export.

Meanwhile the business model of entrepreneurial individual large scale farming, using green revolution techniques involving mechanization, chemical fertilizers, herbicides, and pesticides, as well as seeds developed for improved yield, has been very prominent in many development efforts. Where this has caught on it, tended to result in families of those prominent in the traditional elites commandeering formerly communal lands for themselves, leading to the displacement of lesser lineages into poverty or, at best, employment as agricultural labourers or, at worst, shantytowns now ringing Africa's expanding cities.

Recommendations to prevent this from getting worse would be to discourage the (often westernized and entrepreneurial) elites who constitute Africa's leaders today, from further displacements of tribal and traditional societies from their lands to make room for foreign investors who want to develop agricultural or other enterprises.

Landlessness was not a problem of Africa's people prior to colonialism and it is a major cause of poverty and hunger today. The other major cause is breakdown of traditional tribal risk management in favour of emphasis on turning farms into sources of "income" rather than family and community food supplies. There has been pressure to develop private land tenure and discourage traditional communal tenure where farmers have use-rights (usufruct) as their crop locations rotate through a long fallow system. This is a very flexible system that adjusts access to land to the size of the family group dependent upon it, rather than to the market. Help for small

farmers on traditional usufruct allotments of village communal lands is critical. ICRISAT has some programmes for small farmers, especially women farmers, on communal plots, that might be worth looking into.

The settlement of nomadic pastoralists should also be discouraged not encouraged, by development and foreign aid organizations. Most of this was and is done out of the typical unease, of many state societies, about people who cannot be easily located and whose children cannot be put into schools. Even the best of intentions, under such circumstances, play right into the hands of any special interests who have other plans for the land that the pastoralists traditionally controlled. And regular supplies of food aid from foreign donors are no substitute for traditional systems of risk management. In fact they make it easier to continue to undermine them, especially if the local village elders are left out of the distribution process. This just creates conditions begging for development of corrupt bureaucracies or local warlords.

Planning for, and some control of, reproductive decisions is really a crying need of all the women I ever met in Africa. Yes, they want children, and yes, they want their children to have vaccinations, and medical care, and clean water and opportunities for schooling, but all African women deserve private and discreet access to birth control. This is long overdue in many countries. Men in governments might object, if so, make all development aid and further loans contingent. This is women's business. . I have talked to a lot women, African women are not different. Given a choice, women generally want to have fewer children and to invest more in each child. I am aware that this is a tricky issue. But the fact remains that if population continues to grow to the limits fo food supply, hunger will always be a moving target.

Moreover, there is no need for a development model based on only one kind of production system geared to markets. Nor does it have to be a matter of modern methods being taught; but rather of various techniques and options being offered as possible additions to the traditional methods. People all over the world adopt technology that makes life easier, less risky, and more entertaining. the lightning spread of cell phones should alert us to this! When people live in a cooperative local community, like a village which has its own land base intact, its systems of social control, honour, and welfare intact, they will be far better judges of which technologies and innovations they adopt.

54. Santosh Kumar Mishra, Population Education Resource Centre (PERC), Department of Continuing and Adult Education and Extension Work, S. N. D. T. Women's University, Mumbai, India

1. From your knowledge and experience how have trade agreements and rules affected the four dimensions of food security (availability, access, utilization, stability)?

As a necessary element to human survival, food is a human right. Small, local family farms are the bedrock of traditional rural communities and global food security- the ability of countries to produce the food they need to survive. Yet the global food supply is increasingly falling under the control of giant multinational corporations. Large agribusinesses have rewritten the rules of the global agricultural economy, using "free trade" agreements to turn food into a commodity for profit rather than a human right. The global corporatization of agriculture has had disastrous effects on farmers, food security, and the environment.

Global agricultural policy used to be geared towards maintaining stability in global markets. Supply management programs, also called commodities agreements, helped maintain production around the same as demand, so that farmers didn't produce an oversupply that would cause prices to collapse. These programs helped keep market prices above a price floor, which is a minimum price over the cost of production that farmers need to survive. *In addition,* countries have historically

promoted their local economies by protecting domestic production from foreign competition. Most countries maintain taxes on foreign imports, called tariffs, as well as outright limits on the quantities of foreign imports, called quotas, in order to favor local economic development. This has especially been true in the agricultural sector, where local food production is key to food sovereignty.

Feeding the world in 2050 when our global population is expected to reach over 9 billion is one of the most daunting challenges of our time. In the face of climate change, and with scarce land and water resources, we must rapidly address this challenge and lay in place the right frameworks to boost food production and freeze the environmental footprint of agriculture all along the food value chain. We must also unlock the potential of millions of small producers who could be part of the solution to feed the planet.

Trade is an integral aspect of increased productivity and food security. All farmers, regardless of size, will only produce more when they see an available market. These decisions are no longer as local as they once were. With agricultural value chains becoming more complex, actions taken in far off capitals – and regional and international institutions as well – will have an impact on the rural small farmer more than ever before. The laws and regulations governing the different aspects of value chain development, many of which are part of trade agreements and institutions, also directly tie into market opportunity and productivity.

The potential gains associated with increased trade and easier movement of goods and services are becoming increasingly clear. Trade has now become a significant component of food security efforts and the broader agricultural development agenda. A strong enabling environment – with transparent and well-implemented laws, regulations, and trade policy – is central to value chain development. One of the biggest challenges in creating this enabling environment will be closing the gap between the system on the books and the realities in the market. This applies to domestic and regional laws and regulations, implementation of trade agreements, and transparent regulatory systems alike.

There are positive developments taking place at the intersection of trade, agriculture, and food security. But trade needs to be further integrated and better used as a tool for market development and productivity enhancement. In order to open markets effectively and to the benefit of all, innovation from both the public and private sectors will be increasingly important.

Overall, the 21st century will require a trade policy that is forward-looking and innovative in order to take advantage of future market opportunities. Trade can and should impact individuals positively, add value economy-wide, and deliver broader food security and development benefits. The new vision for agriculture should focuses on three strategic areas:

§ *Facilitating* leadership commitment to action by facilitating dialogue, commitment building and collaboration among diverse stakeholders;

§ *Supporting* country transformation by catalyzing and supporting action-oriented, multi-stakeholder partnerships at regional and country levels; and

§ *Promoting* innovation and best practice by facilitating exchange of innovation, experiences and best practices among stakeholders and regions, and monitoring partnership impact to track progress.

2. What is your knowledge and experience with creating coherence between food security measures and trade rules? Can rights-based approaches play a role?

Trade in agriculture is a vital part of international development. Ensuring that developing countries can have food security and benefit from international trade should be a priority for developed and developing countries alike. The right to food is a fundamental human right. Global commitments to

make food security a reality for all people recognize that fair rules for international trade within a multilateral trade system are essential to achieve this goal. In developing countries, on average almost 60% of people are involved in food production. Trading food at fair prices is essential for their short and long term development. The link between trade and food security becomes clear through an examination of the basic principles, specific policies, and implications of international agreements for people who cannot take food security for granted. Basic principles and specific policies are both important in the debate about food security and trade liberalization:

- *First,* the points of intersection between food security and the agreement should be clarified.
- *Second,* the relationship between international commitments to food security and commitments to trade liberalization must be assessed in order to have coherence.
- *Third,* ways to broaden the definition of food security and its application within trade agreements should be explored.

Agricultural production is about our human need for food, not simply about markets. It is true that not all regions of the world can or should attempt to be competitive in the area of agriculture exports. Households and countries may be able to rely on the international supply of food to satisfy their needs, but only if the rules for trade are fair and give priority to the need for food security. In short, developed and developing countries must work together to ensure that more liberalized trade agreements are compatible with food security.

3. How can a food security strategy, including components that explicitly support small-scale farmers in agro-biodiverse settings, be implemented in ways that might be compatible with a global market-based approach to food security?

Food security is recognized world-wide as a fundamental dimension of national development, good governance and basic human rights. The generally accepted definition of food security is: *"Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food, enabling them to meet their dietary needs and food preferences for an active and healthy life"*. Food security is recognized as a basic human right under international law. *However,* the global food system today is beset by serious challenges and risks:

- *production and prices have become more volatile;*
- *hunger and poverty levels remain high, particularly among farming communities; and*
- *unsustainable practices exacerbate environmental challenges.*

By the year 2050, the world's population will have risen to 9 billion. Feeding this population will require substantial changes to ensure the production, distribution and consumption of sufficient nutritious and sustainably produced food. As the economy grows and markets develop for a variety of products, subsistence production is gradually replaced by production for the market. This tendency is further strengthened when an economy opens up to the outside world. If this happens at an advanced stage, when the population has already crossed the threshold of hunger, as has been the case in the Western world, the shift from subsistence food production to market production does not pose a serious problem to food security. In fact, it may even enrich the diet of the population by enabling it to obtain a wide variety of food from all over the world. But if market orientation occurs at an early stage, when a large section of the population has yet to secure access to sufficient food to guarantee a minimum required diet, questions are bound to arise regarding its impact on food security.

Questions have indeed arisen in recent years in the context of the macroeconomic reforms currently sweeping the Developing World. Markets are opening up both internally and externally, thus providing incentives to farmers to shift towards cash crops. Structural adjustment programs are strengthening these incentives by making production for export more profitable than before. Partly as a result of these policy reforms and also because of increasing urbanization, agriculture can be expected to become increasingly diversified and commercialized in coming years.

In order to gain further insight into the importance of subsistence income on the *'down'* side, it is necessary to consider the forces that are responsible for reducing subsistence income. Two kinds of forces need to be distinguished here. They may be referred to as *'push'* forces and *'pull'* forces. Pull forces are those that divert household resources from subsistence production to potentially more attractive market-oriented activities. Push forces operate when the loss of resources (such as land, labour and capital) compel households to cut down on subsistence activities. These two forces must be distinguished because the loss of subsistence income is arguably more likely to entail losses in food security when it is caused by push forces rather than by pull forces. *Most importantly,* pro-poor transformation of rural economies requires increasing agricultural productivity and efficiency along value chains, diversifying economic activity, and integrating the rural economy into the broader economy through sound market systems. And for the rural and urban poor alike food security is rooted in sufficient, sustainable income. Through value chain and market system analysis, it is possible to:

a) *identify* constraints in agricultural markets, including input and output markets; and

b) *develop* solutions that change the structure of incentives so that market interactions benefit the poor.

55. Dennis Bennett, AfriGrains, Inc, United States of America

Impact Investing, Capital Investment, & B Corps

One rarely explored aspect of the intersection between Trade Policy and Food Security is the issue of Capital Investors, and "Benefit Corporations" or "B Corps". This issue is a corollary to my post on "Impact FDI's vs. 100% Exporters".

IF one of the important ways to improve food security is to develop the Holistic Food Value Chain (or FSVC), and **IF** that development is to be done in such a way that FDI's will have a positive impact on the entire FSVC, **THEN** the question becomes one of "Where does the capital come from?" Who, or what type of firms, are willing and able to invest in "B Corp" or "Benefits Corporation" firms whose mission is to promote that Holistic Food Value Chain (FSVC)?

Capital investment will be necessary to transform subsistence level & manual farming in many rural areas (of Africa & elsewhere) to the Holistic Food Value Chain. Some level of mechanization of farming must occur, storage & handling methods must be developed, transportation must be improved, and markets must be expanded. Those transformative changes require capital investment from somewhere and by someone.

To date, much of the recent efforts at improving smallholder farming seem to have gone into farm productivity improvements. As my earlier post pointed out, this is a necessary (i.e., important) but not sufficient condition. Groups like the HGBuffett Foundation, the Gates Foundation, and others have invested, or committed to invest, millions of US$ to improve seed, soil, fertilizer, and related farm productivity.

Howard G. & Howard W. Buffett's book "40 Chances" is a good view of that approach to Investment in smallholder farm productivity. Unfortunately, both Buffetts presume that storage and transportation systems either pre-exist, or will be magically developed by someone. Given that they are farming in Decatur, IL and Nebraska, that is an understandable presumption. However,

they did not go back into history far enough to see that 170 years ago, grain elevators and railroads did not exist in their locations. The Gates Foundation efforts at food security improvements and ZeroHunger in Africa are similarly myopic, in terms of focusing primarily on farm productivity rather than the entire FSVC.
Another source of potential capital are the International Aid Agencies and/or NGOs. This source of capital has its own challenges, however, because both government aid agencies and non-profit NGO's are primarily geared towards emergency assistance. Because their donor base, funding strategies, and programs (government and non-profits) are focused on addressing crises, funds are rarely allocated towards addressing the underlying systemic causes of food insecurity. Handing out food, or distributing farm hand tools is a good photo opportunity. Building grain silo's, or roads, or buying trucks to move food to markets are long-term capital projects that do not seem to fit the mission of "emergency aid & development".
The one source of capital that seems to be developing, albeit still in its infancy, are the "Impact Investors" and the "Benefit Corporation" (aka "B Corps"). Alice Korngold (A Better World, Inc.: How Companies Profit by Solving Global Problems...Where Governments Cannot) and Cathy Clark, Jed Emerson and Ben Thornley (The Impact Investor: Lessons in Leadership and Strategy for Collaborative Capitalism) have written two of the best, and most recent, books on this area. Paul Polson, CEO of Unilever is perhaps the most vocal advocate of this approach, from a large corporate POV. Lord Michael Hastings (UK) is another very strong advocate.
The first challenge for many Impact Investors and B Corps is the tension between "insisting on normal Private Equity Returns" vs. "lesser financial returns (ROI) but greater "Impacts" as measured by some desired metrics. Are the Impact Investors willing to trade off lower ROI for greater impacts on the "number of lives affected" through investment in food security, grain silos, roads, or markets?
A second challenge, especially in some areas of Africa, is the question of whether the Impact Investors and B Corps are willing to trade off the possibility of some capital loss for the chance to achieve a higher return among the "most needy"? Some Impact Investors have chosen to avoid all risk of capital loss, and hence make their impact investing sound good, but their investments are in "safe" areas that really don't need their capital. Other Impact Investors have chosen to split their ImpInv Funds into several pools, with some funds allocated to "higher risk of capital loss". Those are the investors who can really make a difference in alleviating global hunger – IF they also focus on the entire Food Value Chain, not just farm productivity improvements.
The jury is still out on whether relatively new Impact Investment Funds located in New York, San Francisco, and London have the ability to change the future of Food Security by thoughtful, and perhaps audacious, capital investments in the entire Food Value Chain. Keep Trade Policy neutral, and encourage/support these new sources of capital, and we can eliminate world hunger by 2030.

Dennis Bennett
CEO
AfriGrains

56. Sudhir Kochhar, ARS (Retd.), Ex-ICAR, India

Last but not the least; I would like to address your question from the viewpoint of intellectual property rights and equity (farmers' rights; access and benefit sharing), which are equally important in determining the availability of food resources for trade and development. My observations and comments are given in the attached file.

Availability of food is dependent on production wherein progressively enhanced productivity of crops, animals, poultry and fish is necessary to enhance production for meeting the ever-increasing demand. The trade agreements administered by the WTO do no directly determine the policies to

ensure food availability but indirectly the agreement on trade related aspects of intellectual property rights (TRIPS) and the sanitary and phytosanitary agreement (SPS) affect the availability of food resources through innovative biological interventions and by ensuring their safe transboundary movement, respectively,

'Food security and sustainable agriculture' is one of the 7 priority areas of Rio +20. Further, the United Nations' Agenda 21 as well as the FAO Global System have accorded priority to conservation and sustainable utilization of genetic resources for food and agriculture (GRFA) including a time bound commitment for their integration into sustainable agriculture. Similarly, 'conservation of habitats' was advocated much earlier by the United Nations Environment Programme in the Stockholm Declaration wherein some of the habitats could be harboring wild relatives of crop plants. Nonetheless, a grand challenge is to visualize and agree upon how to, where to, and how much In situ On Farm conservation of the existing conventional crop materials should be promoted, and the smallholder conservers incentivized for the same through policy interventions to ensure a progressive germplasm input for crop improvement for posterity.

The non-legally binding FAO international undertaking (IUPGR) was transformed into the first legally binding international treaty (ITPGRFA) to accommodate the objectives of the Convention on Biological Diversity (CBD) particularly the facilitated access, and a revised agreed interpretation of the IUPGR i.e. the realization of farmers' rights. The WTO Agreements are neutral to these developments. However, the protection of plant breeders' rights, a model brought forward from the UPOV Convention, which was another revised agreed interpretation of the IUPGR, could not be addressed in its successor ITPGRFA. The TRIPS Agreement under the WTO mandated the protection of plant varieties in member countries, either by patents, or a sui generis IPR or a combination of the two. However, the implementation of this part of the trade agreement by the WTO members has been selective.

As of now, the UPOV membership is increasing. There are 72 members and 59 observer States in the UPOV Council, and some non-member countries are observers in its Administrative and Legal Committee (CAL) and/or the Technical Committee. In addition to the 59 observer states, UPOV Council also has 19 Intergovernmental Organizations and 31 International Non Governmental Organizations as Observers. On the other hand, inclination of some other countries to emphasize that they have adopted a non-UPOV model is affecting homogenization, which is urgently required. It is a fact that irrespective of the membership or models adopted, all countries that have their PVP laws in place have adopted the basics of the UPOV model law. This includes the standards for determination of eligibility of varieties for the grant of title (i.e. novelty, distinctness, uniformity, stability, and distinct denomination), the test guidelines (UPOV test guidelines or the national test guidelines that are also developed more or less based on UPOV guidelines), the reference varieties to compare candidate varieties (UPOV and national sets for respective crops), the research and breeding exemption, etc. The UPOV system is progressively developing argument and practices to accord farmers' exemptions under its 1991 model. But there is much more to be done to bridge the gap in overall understanding of the PVP law for moving closer towards international harmony in context of sui generis PVP as per the TRIPS-UPOV. At the same time, realization of farmers' rights could be strengthened under ITPGRFA.

In addition to PVP, another important area needing priority attention of the international community including the business world is international understanding on germplasm collecting and transfer to safeguard increased availability of food through breeding, plant improvement and

business/trade in plant varieties. In 1994, during the consolidation of the IUPGR and its revised agreed interpretations, FAO also brought out an 'International code of conduct for plant germplasm collecting and transfer' (ICCPGCT). The intergovernmental body negotiating the revision of IUPGR in harmony with CBD had also recommended that the code should be reviewed and revised after the finalization and enforcement of the Treaty (ITPGRFA). Much has changed but the revision is still pending. On the other hand, enormous stakes are involved in generating progressively evolved germplasm and its access to breeders and researchers for utilization and benefit sharing.

The degree, variability and intensity of human intervention in agriculture is bound to increase with increased pressures from opposite forces shrinking the agriculture resource base. This could be detrimental to both trade and food security. Small-scale farmers in agro-biodiverse settings have limitation in their understanding to develop their own niche markets and value chains that may have capability to scale up and are compatible with global markets. Protection of geographical indications (GI) could be ideal in two ways. First, for promoting dual protection of competitive farmer varieties, i.e. by GI in addition to their protection under the PVP law, and secondly to extend unlimited (on a time scale) protection to the promising ones through renewal of registration. However, for the time being, this is far from being an adequate preposition to safeguard food security beyond the real-time climate change scenario, and further indulgence is required.

57. Florence Egal, Italy

I have spent most of my carrier working on food security and nutrition (that is from a micro entry point) in an institutional context which privileged national and global policies and saw international trade as an important dimension of food security. It is revealing that I realized only late in my carrier that only 11% of the food consumed in the world came from international trade, and that somehow the tail was wagging the dog.

As we were trying to understand why people were malnourished and food insecure in specific areas, again and again we faced 1/ changes in diets related to globalization and reduced use of and consideration for traditional foods and 2/increased precarity of livelihoods as local farmers were encouraged to "take advantage of the opportunities of globalisation"and concentrate on commodities which would meet the needs of mass distribution. Food products were not food anymore but a means to generate income, and the environmental impact, in particular on biodiversity didn't come into the picture. Socio-economic differences, indebtedness and poverty increased and people migrated away from their areas in search of jobs. Societies break up, rural areas die progressively and consumers health is undermined by inappropriate diets.

Another interesting dimension related to trade is that of food standards. It was never clear to me why a unique set of food safety standards would be required, since some foods have to travel for months exposed to heat and humidity while others were commercialised locally in very different specific contexts. One clear impact has been that smallholder farmers in many areas were not able to access the market any longer and that production was concentrated in the hands of those who could afford to garantee these standards. Recent developments include institution of food fortification standards that exclude non-fortified foods, and sustainability is now the new item on the agenda.

I am increasingly convinced that sustainable development and resilience can only be achieved if we re-localise policy making, build on existing experience, making the best use of local natural resources and engaging all actors in the process. It is not acceptable that promotion of local foods to protect and create jobs, maintain culture and environment, and contribute to more healthy diets is seen as a violation of the principle of free circulation of goods. This of course does not mean replacing one approach with the other but finding the right combination in specific contexts and ensuring micro-macro linkages through real dialogue. Trade certainly has a role to play in food security but should be held accountable for its social, environmental and health impact.

As Carlo Petrini said at the 7/2 event "Le idee di Expo verso la Carta di Milano", free market cannot apply to food.

I am not sure that anybody adheres any longer that markets should be free of any control are a contribution to public good. But it should not apply to food.

58. Moises Jorge Gómez Porchini, Centro Estatal de Capacitación UAT, Mexico

Dear friends,

Since the beginning of the discussion, Dr. George Kent has used NAFTA as an example stating that the priority in these types of agreements is to defend the business interest of the large producers, obviously, since they are the ones being represented in the negotiations.

The issue is that in order to achieve this production system that stresses profits instead of food supply, government regulations and structures that always seek financial gain have been implemented, disregarding not only the food supply, but also the environmental and cultural impact.

In Mexico, the effects from NAFTA have been devastating for the small producers and for the impoverished population, since producers cannot compete against large corporations, and the population´s food purchasing power decreases daily. At the same time, the large producers find themselves in a period of bonanza, since the structure that has been established works for them to export farm products that indeed have risen over the last few years, a fact that makes Mexican officials proud. However, what they do not take into account is that in order to achieve this production, they use resources that should be used to benefit the population at large.

The government encouraged community organizations to be established in every state to determine how resources allotted to farming should be spent. These organizations locally manage state-funded programs, steering them towards what is deemed convenient according to local and national needs. In theory it seems right, but in fact, if these organizations are run by the producer elite circle, as they in fact are, it is reasonable to assume that their priorities shall be in line with what serves their best interest, not what the population or the small producers need, who, as Dr. Kent states, have no place to share their opinion nor defend their interests during the decision-making process.

Therefore, even if it seems unrealistic, it is also necessary to weigh human rights and environmental issues during trade agreements, and the financial issue should not be the top priority. If not done, we will all have to bear the cost, as it is already happening in Mexico, with violence and poverty levels that a few years ago would have been unimaginable.

Best regards from Mexico,

Moisés Gómez Porchini

59. Susan Bragdon and Ekaterina Krivonos, facilitators of the discussion

Dear participants,

We are now at the end of our discussion and we wanted to thank you for rich, detailed and thought-provoking inputs. They certainly provide motivation for further thinking, discussion and debate.

The discussion has also highlighted the need for more analysis as well. Of course, different desires, motivations and interests can be the cause of a difference of opinion or a perspective on an outcome. But we note that sometimes the existing data and evidence are missing so an assertion is in fact more of a supposition on cause and effect rather than something that can be substantiated on current knowledge. Hopefully this dialogue will help us in defining ripe areas for future analysis!

We both have particularly enjoyed and learned a great deal from the experiences in specific regions, countries and projects. We were pleased that so many of you took the time to share your experience, using that to address the questions posed. For us, it is this kind of sharing that makes online consultations like the FSN so valuable (thank you to FAO and FSN!!) Many of you have highlighted certain lessons that can only be learned from hands-on experience, and we highly value that. For example, the situation in the Near East and North Africa region as explained by Isin Tellioglu and the case of peanut trade in Senegal and Cameroon shared by Lal Manavado.

Many problems with trade have been highlighted, including land grabs, resource degradation and the loss of small farmers' livelihoods due to the changing structure of agricultural production and trade, skewed towards large farms and corporations. Ekaterina wonders if trade, in this case, is the root of these problems, or these are wider issues that need comprehensive policy response and certainly a more stringent regulation to correct directly for the market failures that cause them.

We both note how many contributors spoke of the need for a need for more coherence between trade rules and food security measures. Dr. Mishra calls for trade rules to give priority to food security measures. After giving us some historical perspective, Jasmin Marston calls for a realignment towards a fairer trading systems where agriculture and food security are concerned. Andrew MacMillon feels it is wrong to blame global trade rules for the fact that more than half the world's population is malnourished but goes on to say that trade rules are not helping matters. Professor Dhar appreciated the moderators raising the issue of non-trade measures and states "carving out non-trade measures is indeed a task that the trade regime has not addressed despite being asked to on numerous occasions." He specifically notes that the architects of the WTO AoA stated in the preamble to the Agreement that the "reform programme [initiated by the AoA] should be made in an equitable way among all Members, having regard to non-trade concerns, including food security…"

Ekaterina felt that a lot of the debate focused on protecting domestic farmers from external competition, which is only one side of the story. In addressing food insecurity, she argues that one should not neglect the income opportunities that trade provides, including those for the rural poor. There are many positive and well-documented cases that deserve attention. This is not to say that the gains are automatic or that everyone gains from trade. On the contrary, these cases show what

is needed from market participants and government institutions to succeed in seizing the opportunities in trade, and that it is essential to ensure that producers benefit from the export earnings.

Another point Ekaterina would like to make is that the implications of trade agreements for domestic agricultural policy are often overestimated. Under the current domestic support rules of the WTO, there is still substantial space for supporting agriculture in developing countries. Countries should indeed have the liberty to design their agricultural policies as they see fit, to achieve their food security goals. However, if they also want to benefit from market access in other countries, they would be expected to offer something in exchange. That is the underlying principle of any international public good. What becomes critical then, is what type of support should be provided, to whom and through which means. In general, one of the weakest points in this regard has been the lacking support to infrastructure, market development and supporting the farmers to get organized, working through cooperatives or other structures, to professionalize their marketing functions and integrate vertically, capturing a larger share of the value added generated in the sector.

Susan appreciated the exchange around whether or not a food security strategy that explicitly included support for small-scale farmers in agro-biodiverse settings could be compatible with a global market-based approach to food security. Several contributors simply said no, that global markets undermine small-scale farmers in agrobioverse settings. This related to many of the posts on the need for coherence and non-trade measures to promote food security. Susan is uncertain of the role that global markets can play in overall food security without non-trade measures. It is not a trade or anti-trade or a market or anti-market stance. It is about understanding the appropriate role and boundaries of the different approaches. Raising incomes is not synonymous with food security though this sometimes underlies pro-market stances.

And returning to her well-worn subject, small-scale farmers in agrobiodiverse setting, Susan argues that food security over the long run will require support to these systems and an ability to prioritize measures related to them over trade rules. Our world is facing increasing and unpredictable change. The best defence against unpredictability is diversity. The vast majority of genetic and species diversity is maintained on-farm in the form of diverse portfolios of landrace varieties and crop wild relatives adapted to local conditions and continuing to evolve in situ. However, the shift away from traditional production systems and the cultivation of landrace varieties (FAO 2010) has resulted in a loss of 75 percent of plant genetic diversity, and is most reported in the case of cereals where modern breeding efforts are most concentrated. Wale et al (2011) explain that farmers have financial incentives to replace diverse sets of landrace varieties with monocultures of uniform, high-yielding varieties, and abandon traditional agricultural systems. Repercussions will be felt in terms of nutrition, resilience against environmental stress and loss of traditional knowledge. Just to be clear, modern varieties can offer immense public benefit. However the paradox remains: breeding new varieties adapted to increasing and erratic global change is predicated on the availability of allelic variation within and between crop species, while their dissemination contributes to the erosion of this diversity. Insofar as trade and market incentives result in the replacement of landrace varieties, long-term food security requires measures to balance and support these systems.

One area that certainly needs more reliable evidence and analysis is the implication of trade for diets and nutrition. Some situations mentioned by the contributors raise red flags, as worsening

nutrition is sometimes a result of greater involvement in trade. Ekaterina points out that in such cases it would be useful to understand what the underlying problem is – if incomes from exporting cash crops rise, presumably this additional income (in households that benefit) should be spent on more nutritional products. So the question becomes: Are these products not available? Or is this a question of educating households about nutrition, choices, food preparation? When Ekaterina worked in the FAO Regional Office in Santiago, Chile, there was a wonderful initiative that involved renowned chefs, who published easy recipes and demonstrated to the wider population how to cook nutritious and tasty food with relatively low-cost products: Beans, maize, potatoes. We also worked closely with street markets on promoting fruit and vegetable consumption through awareness raising actions. These types of initiatives can make a big difference.

As Ann Steensland mentions, "trade cannot address all of the socio-economic and political challenges that influence food security and nutrition", but we think this discussion demonstrated that there is certainly a relationship, whether positive or negative. It is a challenge for researchers, policy makers, NGOs, farmers and consumers to figure out the priorities and the policy actions in each particular country case.

As we noted in the start of this summary, there is a need for more information and analysis. As Dr. Mishra elegantly and succinctly put it:

- First, the points of intersection between food security and the agreement should be clarified.
- Second, the relationship between international commitments to food security and commitments to trade liberalization must be assessed in order to have coherence.
- Third, ways to broaden the definition of food security and its application within trade agreements should be explored.

As your moderators, we apologize for not being able to call out each one of your contributions individually in our comments and in this summary. We have both learned a lot and you have given us both a lot to think about in our work. We hope you all feel the same way.

Thank you so much for your participation and we are glad to keep up the conversation bilaterally if you want to contact either of us individually.

All the best,

Susan and Ekaterina