

Report of the Regional Agro-Industries

FORUM FOR LATIN AMERICA

Lima (Peru), 5–7 October 2009

FOR A COMPETITIVE, INNOVATIVE AND INCLUSIVE AGRO-INDUSTRY

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views of FAO.

ISBN 978-92-5-007037-7

All rights reserved. FAO encourages reproduction and dissemination of material in this information product. Non-commercial uses will be authorized free of charge, upon request. Reproduction for resale or other commercial purposes, including educational purposes, may incur fees. Applications for permission to reproduce or disseminate FAO copyright materials, and all queries concerning rights and licences, should be addressed by e-mail to copyright@fao.org or to the Chief, Publishing Policy and Support Branch, Office of Knowledge Exchange, Research and Extension, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy.

© FAO 2011

Contents

Acknowledgments	iv
1. Introduction	1
2. Plenary addresses	3
3. Competitiveness round tables	15
Round table 1 – Promotion of research and technological innovation to improve the competitiveness of small and medium agro-industry	15
Round table 2 – Competitiveness policies and actions to promote production and agro-industry	15
Round table 3 – Productive alliances to promote agro-industry	16
Round table 4 – Market access for small and medium agro-industry enterprises	17
Round table 5 – Agro-industrial investment and financing in times of economic and financial crisis	18
Round table 6 – Promotion and support strategies for quality and safety management in agro-industry	18
4. Work groups	21
5. Conclusions and recommendations	23
Conclusions	23
Recommendations for the development of a regional programme for a competitive, innovative and inclusive agro-industry	24
APPENDICES	
A. List of participants	25
B. Side events held during the forum	29
C. Regional agro-industries forum organization team	31
D. Acronyms and abbreviations	33

ACKNOWLEDGEMENTS

I wish to thank all those involved in the preparation of this report, in particular George Kerrigan, FAO consultant, and FAO Rural Infrastructure and Agro-Industries Division (AGS) colleagues: Pilar Santacoloma; Carlos Da Silva; Danilo Mejía-Lorio and Claudia Bastar.

Special thanks go to Andrea Broom and Jim Collis for the language editing; Angelo Stanzione, for the desktop publishing, and Larissa D'Aquilio (FAO-AGS) for the production process coordination.

Florence Tartanac

Senior Officer

FAO Rural Infrastructure and Agro-Industries Division (AGS)

Chapter 1

Introduction



1. The Food and Agriculture Organization of the United Nations (FAO), the United Nations Industrial Development Organization (UNIDO) and the International Fund for Agricultural Development (IFAD), in collaboration with Peru's National Agricultural University, Universidad Agraria La Molina (UNALM), brought together ministers and government officials responsible for agriculture, trade and industry with food industry leaders, agro-industry specialists and civil society representatives at the Regional Agro-industries Forum for Latin America, to make an in-depth analysis of challenges and strategies for national and regional intervention. The forum, attended by 142 high-level delegates and professionals from 16 countries, examined the contribution of agro-industries to economic development and the challenges facing them. The forum also promoted dialogue between the private and public sectors in order to encourage partnerships for developing competitive agro-industries.
2. The development of competitive agro-industries is crucial for creating jobs and opportunities for income generation, as well as for stimulating demand for value-added agricultural products. Development in the sector could provide employment in poor rural areas, not only in traditional farming activities, but also in more specialized activities, such as processing, packaging, transporting and marketing agro-industrial products.
3. To achieve this, it is important to formulate appropriate policies and strategies for promoting agro-industries based on available knowledge and experience. To this end, FAO, in collaboration with UNIDO and IFAD, held the Regional Agro-industries Forum for Latin America jointly with Universidad Agraria La Molina, in Lima, Peru, from 5 to 7 October, 2009.
4. The regional forum called on governments and entrepreneurs from countries in the region to formulate strategies for developing competitive agro-industries, incorporating small and medium agro-industrial producers and their administrative organizations as key stakeholders in agro-food value chains. The specific aims of the forum were as follows:

 - Promote a common understanding of key factors for the competitive integration of small and medium agro-industrial producers into value chains.
 - Learn from key lessons and from successful activities relating to the development of competitive, inclusive agro-industries.
 - Boost collaboration and joint activities among multilateral organizations responsible for promoting agro-industrial development and clarify the role of the public sector, private sector, academic and scientific sector and multilateral organizations in this development.
 - Encourage the participation of multilateral organizations and financing institutions in launching national and regional initiatives, with a view to promoting agro-industrial development.
5. During the regional forum, plenary addresses and thematic round tables analysed strategies that reflect the interests and meet the specific needs of the various stakeholders.
6. Peru's Minister of Agriculture, Adolfo de Córdoba, inaugurated the forum, together with Mr Abel Mejía, Rector of Universidad Nacional Agraria La Molina, and Ms Florence Tartanac, Agro-Industries Officer, FAO Rural Infrastructure and Agro-Industries Division (AGS). The inaugural ceremony was held on 5 October 2009.
7. In his address, Mr Abel Mejía emphasized the role of science and technology in agro-industrial development, adding that innovation and the integration of all key sectors in a country's agro-economic development were critical to ensuring that development culminates in a production and development chain that adds value to the final product.

8. Ms Florence Tartanac opened the forum's activities and commended the opportune timing of the event, emphasizing the need to create a new role for rural agro-industries in the food security of countries in the region. She went on to define agro-industry as a broad concept that refers to the establishment of enterprises and supply chains for developing, processing and distributing specific inputs and products in the agricultural sector, adding that agro-industry refers to marketing and value addition in the agricultural sector, with a focus on post-production (food-processing) enterprises and building linkages among enterprises in value chains.

After reviewing the sectors generally covered by the agro-industry concept, she highlighted the important role they play in the manufacturing sector in terms of employment and foreign investment. She positioned the forum as a continuation of the Global Agro-Industries Forum held in New Delhi, India, in 2008 and pointed to the international community's growing concern and interest in the issue. She concluded by outlining the regional forum's aims, programme and methodology.

Chapter 2

Plenary addresses



9. During the first two days of the forum, five plenary addresses were given by distinguished political advisers and private-sector representatives. The plenary addresses presented the issues critical to the development of competitive agro-industries and focused on aspects that promote the sustainable inclusion of small farmers in this process.

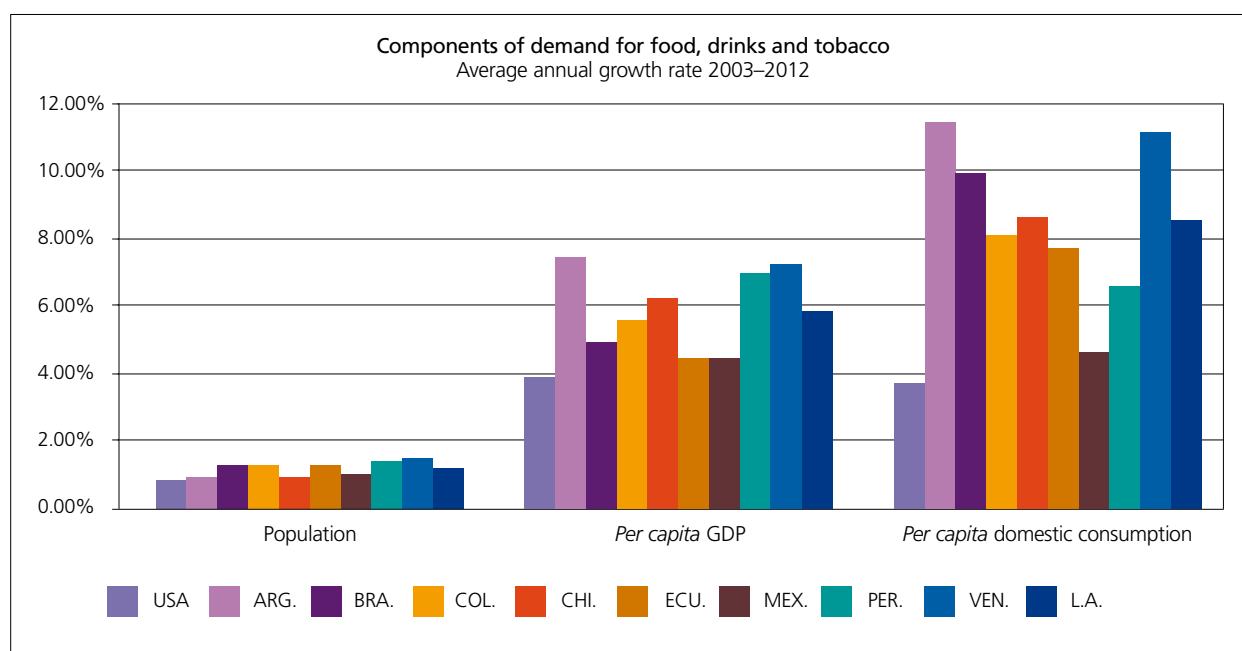
10. The first plenary address by Mr George Kerrigan, FAO Agricultural Development Consultant, presented an *Overview of agro-industries in Latin America: key indicators*. The expert gave a detailed and comprehensive description of the agribusiness sector in Latin America based on available statistics, presenting recent trends and the current status of the agricultural raw materials processing industry in Latin America, as well as its contribution to national development, by reviewing some of the key agribusiness indicators to show trends in industry demand, international trade, production and employment.

11. The expert began his presentation by pointing out that the agribusiness sector benefits from an environment in which the region has achieved excellent indicators over the past decade in terms of growth in production, exports and *per capita* spending. However, he added that the current situation remains uncertain, in view of the international financial crisis and its medium-term impact in the region. He went on to review changes in the business environment affecting the industry and changes within the industry itself, highlighting the dynamic trend in the region, with aggregate demand for food growing by an average of more than 8 percent for the period concerned.

However, the expert pointed out that, based on income growth trends, the percentage of household expenditure on food is declining in relation to other household budget items at a regional average rate of 1.2 percent.

12. He pointed out that, in terms of industrial value added, the food, drinks and tobacco industry

FIGURE 1. Growth rate of food, drinks and tobacco by country



Source: G. Kerrigan based on data from the Economist Intelligence Unit

represents close to 30 percent in three of the countries studied: Argentina, Chile and Colombia. For Venezuela and Mexico, the figure is close to 20 percent and for Brazil, 13 percent. It is important to note that all countries show a slight variation in the size of value added in the food, drinks and tobacco sector over the course of nearly two decades and that there is a lack of dynamism compared with changes in demand.

13. Another development variable to which the agro-industries sector contributes significantly in the region is job creation, representing more than 20 percent in all countries surveyed. In Chile, the sector accounted for a significant 37 percent in 2007. Similarly, in the four countries for which data are available, the trend in average wages in the sector shows greater positive real growth than for the entire manufacturing sector, compared with 1970.

Another important variable, given its impact on development, is labour productivity in the food, drinks and tobacco sector. In Argentina and Chile, the productivity growth rate for the sector is well above that of industry as a whole. The figures are 5 percent and 2 percent respectively for Argentina and 2.5 percent and 1.2 percent for Chile. However, productivity is lower in Colombia, Mexico and Brazil, in line with the trend in the United States of America (USA).

14. Another interesting point of comparison, according to Mr Kerrigan, is the technology gap, defined as the difference between the productivity of the food, drinks and tobacco sector in each country and the productivity achieved by the same sector in the USA. This shows that the productivity gap is greatest for the food, drinks and tobacco industry in Argentina (65 percent) and Colombia (39 percent), followed by Chile (35 percent), Mexico (26 percent) and lastly Brazil (10 percent).

This is the biggest weakness of the food, drinks and tobacco sector. With the exception of Brazil, in all other countries the productivity gap is greater in the food, drinks and tobacco sector than in industry as a whole, pointing to a need for specific sector policies targeting improved productivity and international competitiveness.

15. Up until the 2007–2008 crisis, the agro-industries international export trade performance in the current decade had achieved an average annual growth rate for the entire region of 11 percent, rising from US\$63 billion in 2000 to US\$163 billion in 2008. This means that, in value terms, it more than doubled

(2.6 times) over a period of eight years – a very positive performance. All countries studied, except Cuba and Venezuela, improved their export performance over the decade.

As for the main export products, the export basket for the region covers a wide range of products, such as fruits and vegetables (14 percent), meat and meat preparations (11 percent), concentrated animal feed (9 percent), oilseeds (9 percent), cereals (7 percent), fish and seafood (5.5 percent), sugar (5.8 percent), oils and vegetable fats (5.5 percent) and coffee and cocoa (5.5 percent).

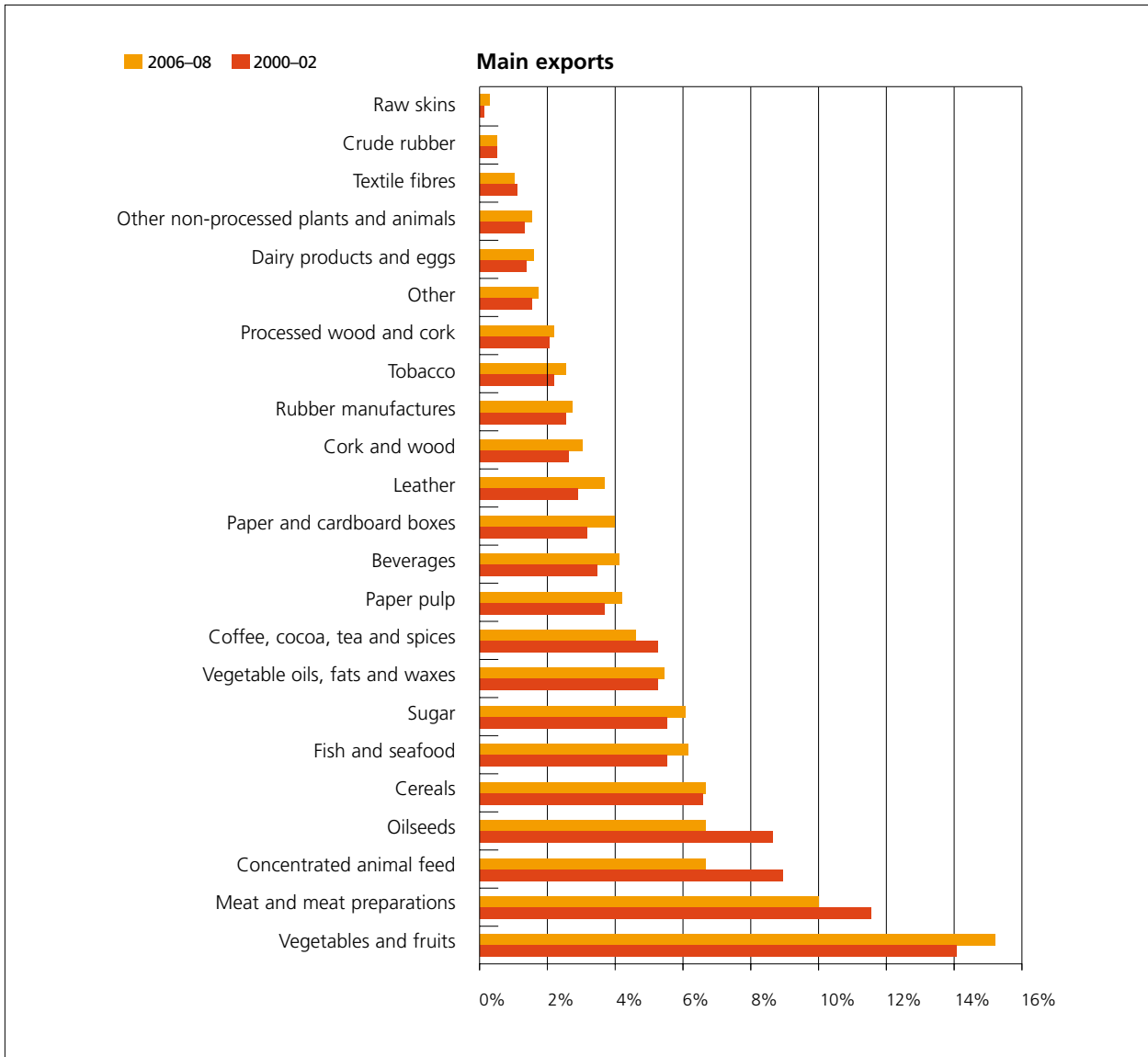
16. Mr Kerrigan stressed the importance of small and medium enterprises for the industry. According to agribusiness surveys conducted by the World Bank, small businesses represent 55 percent of agro-industry firms in Latin America. Some countries are above this average, such as Venezuela with 80 percent, Nicaragua, Guatemala and Mexico with over 70 percent and El Salvador, Honduras and Colombia with over 60 percent, while the figure for Peru is close to this value. This means that, in nine of the fourteen countries for which records exist, small industries are economically extremely important in the agro-industrial sector.

17. Another feature of Latin American agribusiness is that external financing for investment in agro-industrial projects remains significant in the region, averaging around 50 percent in the cases analysed.

18. Towards the end of his presentation, Mr Kerrigan gave an overview of: (i) strengths (availability of natural resources, labour, connectivity and access to markets, a favourable climate for the growth of private enterprise, internal and external market strategies); (ii) opportunities (higher incomes, mass consumption of processed products, lower trade barriers); (iii) challenges (sustainable environmental management, trade marketing, integration of the value chain, enterprise internationalization, proactive public innovation policies, greater profitability, increased productivity, reduced costs, economies of scale) and (iv) threats (loss of world market share for the region, market concentration in oligopolies and oligopsonies, a decline in the percentage of capital from local businesses in the market and the lack of stable and attractive regulatory frameworks for the sector).

19. Based on the above, Mr Kerrigan concluded by presenting the basic components for discussion of a regional development programme for the agro-

FIGURE 2. Latin America export basket



Source: G. Kerrigan, based on the United Nations Commodity Trade Statistics Database, COMTRADE

industrial sector: (i) creation of an enabling environment for competitive agro-industries (governance and public policy stability, macroeconomic policies that encourage productive investment, development of competitive advantages, a favourable environment for public-private partnerships, adoption by companies of a policy of economic inclusion); (ii) progress based on innovation and technology adoption (the need to bridge the technology gap in the sector, based on the use of information and communication technologies); (iii) business development for small farmers and agro-industrial small and medium enterprises (SMEs) (development and interconnection of agro-food chain value networks, linking supply

with flexibility in negotiation, policies for attracting local and foreign investment, rural infrastructure development, harmonization of rules of origin and sanitary rules); (iv) global citizenship and corporate social responsibility (economic inclusion, traceability, safety and environmental management).

20. The second address, on *Enabling environments for agribusiness and agro-industry*, was given by Mr Carlos Da Silva, Senior Agribusiness Economist, FAO Rural Infrastructure and Agro-Industries Division. He stated that a favourable investment environment is defined as a set of policies, institutions and support services that form the environment in which

entrepreneurial activities are initiated and developed – what might be described as the climate for conducting business. While they are common to all economic sectors, they can be properly applied to agriculture.

21. The expert described the experiences of the World Bank, International Financial Corporation (IFC) and Organisation for Economic Co-operation and Development (OECD) in the sphere of standards and indicators for a favourable investment environment in the industrial sector and its validity for the agricultural sector. The World Bank and IFC place the emphasis on trade relations and consider ten specific variables: (i) opening a business; (ii) licence management; (iii) employment contracts; (iv) property registers; (v) credit facilities; (vi) investor protection; (vii) taxation; (viii) cross-border trade; (ix) compliance with contracts; (x) closing a business.

This is an operational-based framework, enabling comparisons to be drawn between 183 economies by pointing out the normative costs for companies, which are useful for analysing concrete rules that favour or

constrain investment, productivity and growth. In conclusion, while this operational framework is not above criticism, it is highly effective as an incentive for reform.

22. The OECD takes a more strategic view of a favourable environment and includes such issues as: investment policy, transparency, protection of property and non-discrimination, investment promotion and facilitation, measures to promote and attract investment, including fiscal and financial incentives, trade policy, measures to facilitate international trade, customs costs, rules, trade agreements, competition policy and laws encouraging competition. It also considers tax policy, the burden and administration of taxes and duties, corporate governance, transparency, stakeholder rights, accountability, policies to promote responsible business behaviour, human rights, environmental safety, labour relations, financial transparency, human resource development, government policies for work experience and training at the various levels, infrastructure and financial

FIGURE 3. An array of half-cooked snacks, rotating for further processing



© flickr/Bruce Thompson

sector development, investment policies and processes for assessing the needs and capacities of the various sectors, including finance, public governance, the quality of regulations and public sector integrity.

23. The speaker described the results of the regional workshops held under the aegis of the Global Forum on Agricultural Research (GFAR) in relation to the main factors considered to provide an enabling environment for the development of agro-industries. These include: financing agribusiness (availability, access, conditions), food safety and quality standards (plus associated infrastructure), legal and regulatory frameworks (stable rules), clear roles for the public and private sectors in developing agribusiness (facilitation through leadership), research and development policies for the agrifood sector and the provision of adequate rural infrastructure.

24. The expert concluded by identifying potential areas for FAO assistance to countries to stimulate the agro-industrial sector: assessing and disseminating

international experiences for changing the agribusiness climate; helping to formulate sectoral development strategies; generating agro-industrial statistics; capacity-building; developing methodologies for environmental assessment; supporting the formulation and development of national standards on enabling environments for agribusiness development.

25. The goal should be a method for developing environments, taking into account the key role of governments and giving access to full information for clear diagnostics. Lastly, clear policies and partnerships are needed to overcome the obstacles inherent in political processes, such as incompatible goals in national plans, conflicting stakeholder interests, blurred mandates of government agencies and poorly defined private and public sector roles.

26. The third plenary address on *Rural agro-industry in Latin America: context and challenges* was delivered by Mr Hernando Riveros, Hemispheric Agribusiness Specialist, Cooperative Programme for the

FIGURE 4. Roasted coffee beans



© flickr/sarahemcc

Development of Rural Agro-Industry in Latin America and the Caribbean (PRODAR) of the Inter-American Institute for Cooperation on Agriculture (IICA), who examined four issues relating to rural agro-industry: patterns and trends in current demand for processed agricultural products; the recent development and current status of agribusiness based on the ownership and management of small family units; institutions and support policies and challenges for its sustainable development from a regional perspective.

27. In the first part of his address, Mr Riveros described current trends in the macroeconomic environment, the supply of agricultural products and demand for agro-industrial products, presenting rural agro-industry with serious challenges in complying with the technical and commercial standards arising from this demand. The main feature of demand is that consumers value services that ensure that the product is in the right place, at the right time, of the expected quality, attractively presented and at the right price, more than they value 'physical' foods.

28. He went on to describe the current status and importance of rural agro-industry. The audience agreed with the presenter that, despite the lack of official statistics, rural agro-industry still plays an important role in the food chains of countries in the region. Smallholder farming (family farms, independent or small-scale producers) continues to thrive and has regained its place in international development and cooperation programmes. He also highlighted greater diversification in the basket of products offered by smallholders by leveraging local diversity to meet emerging market opportunities; migrant-driven demand; linkages with other stakeholders in the chain, especially agro-industries and agro-exporters; process innovations to meet changing consumer lifestyles and market requirements; promotion of local cuisine and development of 'fusion cooking'.

29. The expert then analysed the institutional and policy support available for the development of rural agro-industry. He pointed out that, at regional level, the institutional provision of technical and financial support has increased, in addition to the progress made at institutional level in creating public services to support rural agro-industry, a policy instrument for the host of initiatives to mobilize resources and improve the operating environment of small and medium rural agribusinesses.

Other initiatives of interest in the region are programmes designed to support added value and

product differentiation in rural agro-industry. A third group of initiatives supports quality management and differentiation, such as Argentina's agrifood/agribusiness programme and the labelling and image enhancement programme of Chile's Agricultural Development Institute (INDAP).

Mr Riveros added that mechanisms had been developed to facilitate access to financial services and asset investment in the region. He also mentioned a number of programmes for promoting export development and supporting rural youth entrepreneurship.

The Brazilian Agricultural Research Corporation (EMBRAPA) has made sporadic progress in the field of technology transfer through two of its centres: EMBRAPA Tropical Agro-Industry and EMBRAPA Food Technology.

Recent developments include a proactive approach to compliance with standards developed in Brazil through special procedures for the environmental licensing of small, low-impact rural agro-industries, promoted by the Ministry of the Environment and the Unified Agricultural Health System (SUASA).

30. Mr Riveros then spoke of the challenges facing the region, including consolidating and expanding on past and ongoing institutional progress, developing a strategy to boost the supply of research and technological development services applicable to rural agro-industry. Further challenges include creating a community network to facilitate exchanges of experience; identifying and measuring impact indicators; forming partnerships with academic institutions to document, systematize and disseminate experiences; turning lessons learned into public policy proposals; promoting and implementing initiatives for developing new policy tools and systematically integrating large companies into the rural agro-industry development process.

31. To conclude, he offered a series of recommendations to consolidate and build on the achievements of rural agro-industry in the region. He mentioned support for consolidating and expanding on past and ongoing institutional progress, by designing and implementing strategies to foster information- and experience-sharing and knowledge management, as well as promoting and implementing initiatives for the development, testing and validation of tools to facilitate rural agro-industry support and promotion interventions in Latin America.

He proposed formulating a strategy to boost the supply of research, technological development and innovation services in rural agro-industry, to remedy

institutional weaknesses in this field in recent years, combining this initiative with hemispheric and regional fora on agricultural innovation: the Forum for the Americas on Agricultural Research and Technology Development (FORAGRO) and Collaborative Research and Technology Transfer Programmes (PROCI).

He also suggested promoting regional agreements with organizations with a regional mandate for the purpose of supporting and complementing FAO and IICA activities, such as the World Business Council for Sustainable Development, the Inter-American Development Bank (IDB) and the Multilateral Investment Fund (MIF/FOMIN), along with other international technical and financial cooperation agencies.

32. The fourth plenary address, on the *Promotion of agro-industry in Peru*, was delivered by Mr Magno Meyhuay, from the Ministry of Agriculture of Peru, who highlighted the progress made by agribusiness in Peru and the challenges for developing the country's agro-industrial potential.

33. Mr Meyhuay pointed out that major agro-industrial development has been achieved in Peru in the past decade thanks to a favourable investment environment in the sector and attractive prices for fresh and processed agricultural products. He added that one reason for this favourable environment is that Peru has regulations for promoting the agribusiness sector – decree 1035/2008 – which promotes private

FIGURE 5. Apples on a conveyer belt



© flickr/hint of plum

investment in agriculture and agribusiness. As a result, traditional and non-traditional agricultural exports grew by an annual 17 percent between 2000 and 2008.

34. After reporting on a series of major achievements by Peru in the field of social capital in the agribusiness sector, stemming from a proactive policy for the sector, Mr Meyhuay described the main elements of the government programme for the sector, which include: a capital injection of US\$700 million over the next five years; completing the implementation of milk collection and cooling centres in small dairy regions of Sierra Sur de Ancash, Sierra de Lima, Sierra de Arequipa, Cusco and Huancavelica; launching a competitive fund (AGROEMPRENDE) with an initial non-refundable US\$30 million to boost competitiveness in the agricultural sector for the benefit of 21 regions and 880 rural district; financing agricultural, livestock and agribusiness projects for the purchase of machinery and equipment, technological innovation and business and commercial management training services; raising awareness among high-level regional and local government representatives to persuade them to promote agro-industry; supporting the implementation of a potato-flour plant in Cusco with

funding from the Korea International Cooperation Agency (KOICA); enacting a law on tax exemption for processing plants built more than 2 500 metres above sea level; training in good manufacturing practices (GMP) and good agricultural practices (GAP) (Version 03) for more than 200 producers, agribusiness managers and technicians from 15 regions, and institutionalizing GAP nationwide by setting up regional committees. Mr Meyhuay concluded by stressing the importance of coordinating all these actions and policies, which calls for the development of a national agro-industrial development plan involving the public and private sectors.

35. The fifth plenary address, on *Technologies for the future*, by Mr José Miguel Aguilera, Professor in charge of the Food Engineering Department, Faculty of Engineering, Catholic University (UC) of Chile, emphasized the advances made in the field of food science, as well as the technology gap in the sector at regional level, urging Latin American countries to step up their research and development efforts.

36. The ability of agribusiness and the food industry, in particular, to meet the substantial increase in demand

FIGURE 6. Industrial bakery



©FAO/G. Napolitano

for food in Latin America in the next 20 to 30 years, which could almost double current requirements by 2050 will, to some degree, stem from population growth (expected to rise from the current 580 million to 800 million inhabitants in 2050) but, most of all, from increases in personal income, changes in lifestyles and consumption habits brought about by gradual urbanization. Meeting this need will depend largely on the implementation and improvement of existing technologies, as well as on the implementation of modern and innovative technologies. Mr Aguilera pointed out that the challenge facing Latin America's agro-food industry is to produce consistently good-quality food that is safe to eat, as well as boosting exports using technologies that ensure environmental sustainability.

37. In his presentation, Dr Aguilera introduced the concept of drivers of technological change in the food industry as forces that encourage innovation and technological change in firms. The main drivers are social, economic and environmental change, science and technology and new public policies. Social drivers include consumer awareness, perceptions, attitudes and beliefs that affect preferences and choices, rising *per capita* income in the poorest sectors, demographic change (such as migration and longer life expectancy) and lifestyle changes associated with increasing urbanization (such as fast food and eating out). The most important economic drivers are loss of food (quantity and quality), the cost of commodities and raw materials (food versus fuel), the cost and availability of labour, exchange rates (exports), technical and economic support for small and medium enterprises, combating unemployment (role of SMEs), the cost of meeting quality standards and regulations (for example, environmental), the cost of permits, adequate rates of return on investment and access to venture capital. Environmental drivers include waste reduction throughout the supply chain, reuse, recycling, recovery, safe waste disposal, water conservation and use, improved energy efficiency, reducing the carbon footprint, reducing emissions and optimizing resource use.

38. Finally, key political drivers include institutional changes in the sector, appropriate national and international regulatory frameworks (food safety agency), fiscal incentives for research, development and innovation, barriers to international trade, food policies, traditional diets and health, education (teaching English), training policies and human capital formation.

39. Dr Aguilera went on to highlight the most promising new technology areas: biotechnology, bioinformatics, nanotechnology and information and communication technologies. He also warned that the marketing, promotion and distribution of products with the aforementioned technological innovations will need to deal with the potential long-term impacts and risks to human health (toxicity, allergenicity) and to the environment (such as increased resistance to pests and diseases).

40. Dr Aguilera concluded his address by focusing on the problem of food safety in Latin America. Contaminated food is a major health problem throughout the world. Not only does it contribute to morbidity and mortality, in many countries it is also a major factor in declining economic productivity.

The main risks are inadequate supplies of drinking water, lack of proper waste disposal and poor access to refrigeration for preserving food. Clearly, efforts should focus primarily on preventing contact with sources of contamination in the food chain. Second, food SMEs and households should be aware of the critical points where there are safety risks during the manufacture or home preparation of food, by

FIGURE 7. Meat processing plant



© flickr/S. Bhansali

implementing some sort of hazard analysis and critical control point (HACCP) procedure.

Concerns about food safety will affect countries of the region mainly in two ways. First, exports will be subject increasingly to the high standards of Codex Alimentarius and unilateral food safety rules imposed by importers. Second, the concerns and regulations in vogue in the developed world will spread to local markets. A new form of protectionism is emerging through high food safety standards imposed by more developed importing countries, which production technologies cannot comply with quickly and the existing analytical capabilities of exporting countries cannot guarantee, leading to a higher rejection rate at ports of entry.

41. The sixth and last plenary address, on *Towards a public-private agro-industrial development programme*, by Mr Alejandro Escobar, Operations Officer, Multilateral Investment Fund, Inter-American Development Bank, concluded by stressing the importance of the agricultural sector and its development in recent years, as well as its contribution to the gross domestic product (GDP) of Latin American countries. It has been estimated that 1 percent growth in agricultural GDP in Latin America has a positive impact of 0.12 percent on overall GDP, which is significant.

Also noteworthy is the important role of agriculture in Latin America in creating jobs and reducing poverty. There is continuing population growth in rural areas, even with the strong trend for migration from rural to urban areas. Even so, Latin America has a lower rate of urban growth than such regions as South Africa, South Asia, North Africa or the Middle East. This stems from improvements in the rural sector, such as the expansion of basic services, political and regional decentralization and, most important of all, the formation of 'secondary' cities, close to rural areas, with which they maintain economic, social and political links. He further emphasized that, although there is still plenty of room for improvement, given that poverty remains high in these areas, in Latin American countries, agriculture still makes a significant contribution to the economy in general and to employment. For countries with *per capita* income between US\$2 000 and US\$8 000, the contribution is 8 percent of GDP and 22 percent of employment. Perhaps most important of all is that the agricultural sector plays a major role in reducing poverty in the region, as 1 percent growth in agricultural GDP leads to a spending increase by the poor up to 2.5 times higher than for non-agricultural GDP growth.

Another important trend in Latin America's agricultural sector is ageing of the rural working population. Colombia provides a clear example, where the average age of coffee growers is currently more than 50 years. This calls for strategic alliances between the private sector and government development agencies to improve the targeting of policies and exploit market opportunities, given that they have huge potential to affect the sector on such key issues as job creation, technology and knowledge transfer, and for the implementation of a public-private agricultural development programme.

42. Other internal and external factors in addition to those above can have a positive impact on the business and production structure. A clear example is the current boom in 'agritourism', created by the strong rise of secondary or rural cities, accompanied by improvements in sustainable road infrastructure, for example, which helps to reduce transportation costs and has a positive impact on the agricultural sector. In addition, the strong rise in the mining sector contributes significantly to increasing the rural population and creates opportunities for the agricultural sector, as all movements of employees involved in natural resource exploitation create a need to maintain and cater to newcomers to a given area by supplying them with food and services.

43. He then referred to the significant population of small producers in Latin America, who account for an average 60 percent of total production, and the resulting need to improve small producers' ability to become integrated into agribusiness value chains, bearing in mind the social and economic implications. Some of the main spheres of public action are financing, technical assistance, guarantee and insurance systems, differential tax treatment and support for partnership building.

Mr Escobar went on to list some of the main factors determining a country's agricultural structure when designing a public-private programme: markets and business trends in the agricultural sector, farm size and concentration of the means of production, in addition to water resource availability, environment and typology, which differs in each country.

Strong pressure from market trends has given rise to 'non-traditional' products, such as flowers, asparagus, fruits and vegetables, and has also led to a recovery in traditional products, such as coffee in Latin America and Central America. A clear example is the variation in the price of coffee over the past ten years, remaining high in recent years.

44. Another important trend is growing customer preference for organic products, which is being driven by an increasing desire to consume healthier, more natural and environmentally friendlier products. This sector presents many new opportunities for small producers, which makes it vital to develop a public–private programme. This consumer behaviour shows a clear trend towards continuing growth in the future.

Mr Escobar also described practices and trends in agricultural supply and trade logistics, driven by the ‘revolution’ in supermarkets, which currently retail at least 60 percent of agricultural products. In the area of food quality and safety assurance, they are forging ahead of health institutions by defining rules and standards. However, small farmers find it more difficult to comply with all these standards and rules, leaving them on the outside with no access to the market.

45. Analysis of all these important factors raises such questions as: Who should initiate communication between public and private bodies? Who should participate? Which approach should be used? In view of the aforementioned trends, the private sector, companies, producers and exporters should take the initiative on formulating a public–private programme and key related issues. This often takes the form of establishing producer guilds and associations.

46. As the sector’s ‘governance’ is in transition, moving towards a larger role for the private sector and the market, public–private partnerships must demonstrate a clear business orientation, opening up to industry to explore where trends are heading, and dialogue with financial institutions and business leaders in the sector is very important.

47. The expert concluded by stressing the importance of mapping the structure of agricultural trade or describing the value chain that characterizes the structure and size of smallholder farms to make a proper assessment of their true potential.



48. Six round table discussions with panellists specializing in various fields were held during the second and third days of the regional forum.

Round table 1 **PROMOTION OF RESEARCH AND TECHNOLOGICAL INNOVATION TO IMPROVE THE COMPETITIVENESS OF SMALL AND MEDIUM AGRO-INDUSTRY**

49. This round table was attended by prominent professors and researchers: David Campos Gutierrez, Dean of the Faculty of Agribusiness of UNALM, Peru's National Agricultural University; Juan Antonio Nevero, Director, Food Industry Engineering Course, Monterrey Institute of Technology and Higher Education (ITESM), Mexico; Eugenia Muchnik, from the non-profit private corporation, Fundación Chile, and Javier de Cross, Veracruz Technology Institute (ITVer), Mexico. The round table was moderated by Mr Danilo Mejía, Agro-industries Officer, FAO-AGS.

50. Mr David Campos stressed the urgent need for an alliance between national centres of applied research and the agribusiness sector with respect to adding value to agricultural raw materials. He outlined the development of research and technological innovation under the current, more flexible, system with multiple stakeholders, including universities, public research organizations, non-governmental organizations (NGOs), private companies and farmers' organizations. He also pointed out that value added could be increased through improved quality, modern techniques and the development of new products geared to demand. The development of new products requires mainly knowledge of consumers, markets and cofinancing and the respective action. Mr Campos said that partnership-building between the public and private sectors is key to improving the competitiveness of the agribusiness sector, where both sides recognize a common area of concern.

51. The second presentation, by Mr Juan Antonio Nevero, focused on *Improving the safety and quality of agro-industry through technological, sociocultural and economic innovation and their cost-benefit ratio.*

He referred to food safety and innovation based on five main global health and safety trends. These are: growth in global trade flows; consumer preferences; supply of safe, quality products; health alerts and, lastly, traceability, in order to reduce food contamination. He added that it is essential to back this with adequate quality controls from the start of the process as far as the consumer, to ensure innovation-based food safety and quality.

52. In her presentation, Ms Eugenia Muchnik, an expert from Fundación Chile, highlighted the organization's work and its strategy to innovate and improve the competitiveness of agribusiness, based on a market-oriented public-private partnership model to take advantage of new opportunities and needs, with the emphasis on entrepreneurship, innovation and the market. The success of this model is illustrated by the positive trend in exports of Chilean salmon after Fundación Chile set up a scheme for growing crops to feed salmon.

53. The fourth presentation, by Mr Javier de la Cruz, discussed *Strategies for the development and dissemination of innovative methodologies and technologies for capacity-building in the agro-industrial sector.* He outlined the main strategies for enhancing the development and competitiveness of small and medium enterprises. He added that relevance and feasibility are crucial to transfer and implementation plans. This should be accompanied by technology transfer, following systematic steps for successful development, in addition to the optimization of innovation networks to facilitate this process in the agribusiness sector, while strengthening the local, national and regional development and promotion framework.

Round table 2 **COMPETITIVENESS POLICIES AND ACTIONS TO PROMOTE PRODUCTION AND AGRO-INDUSTRY**

54. This round table was attended by prominent panellists and senior government officials from a number of countries in the region, including:

Mr Roberto Kreimermann, National Director of Industry, Ministry of Industry of Uruguay; Mr Rodrigo Diez de Sollano, Managing Director of the Shared Risk Trust Fund (FIRCO), Mexico; Mr Ronaldo Perez, Professor, Department of Food Technology, University of Viçosa, Brazil, and Mr Carlos Pomareda, Consultant, International Business Development Services (SIDE), Costa Rica. It was led and moderated by Mr Antonio Assefh, Director of the UNIDO Regional Office.

55. This round table began with a presentation by Mr Robert Kreimermann on *Industrial strategies in Uruguay: agro-industrial production chains*. He described the evolution of these chains, backed by key indicators and figures for the agribusiness sector in Uruguay. He explained that this sector forms a substantial part of the country's economic and social fabric and its development strategy. Mr Kreimermann added that this is why the industrial strategy guidelines has introduced new policies to enhance the role of technology in the supply chain.

56. Mr Rodrigo Diez de Sollano explained the objectives of FIRCO as a development mechanism and instrument for channelling resources (such as venture capital), without financial cost or profit-sharing, to facilitate the creation of agro-industrial projects. Once they recover the resources invested, the beneficiaries reinvest them in the agro-industry and either capitalize them as part of their assets or set up an investment fund. A risk-sharing fund operated between 2000 and

2007 to support added value in rural agribusiness by investing in different processes.

The Support Project for Value-added Agribusiness using Shared-Risk Schemes (PROVAR) has been in operation since 2009, providing complementary financial services for the implementation of market-driven projects that add value to primary production and/or promote the use of renewable energies. This programme has five components: agribusiness, organic certification, nature tourism, citrus plants and biogas.

57. In the third presentation, Mr Ronaldo Perez discussed current conditions and development actions in rural agro-industries. He explained the link between the current conditions and their consequences, calling for steps to be taken to improve the structure of supply and demand to make it easier to access markets other than local ones with low-income consumers, where the product itself loses value. To achieve this goal, Mr Perez stressed the urgency of setting priorities and proposing actions for territorial development, implementing joint actions by the various stakeholders (including institutions, universities, government, banks and distributors).

Round table 3 PRODUCTIVE ALLIANCES TO PROMOTE AGRO-INDUSTRY

58. This round table comprised the panellists Ms Adriana Bello, Director of the Productive Alliances Programme, Ministry of Agriculture of Colombia; Dr Luis Paz Silva, Advisor to the Ministry of Production, Peru; Mr Hernan Rojas, Director of Chile's Agricultural Development Institute, INDAP, and Mr Mark Lundy, Researcher at the International Center for Tropical Agriculture (CIAT) in Colombia. The debate was chaired by Ms Florence Tartanac, FAO-AGS.

59. The round table began with an address by Ms Bello, who presented the productive alliance support project, explaining the problem of individual small producers with no market access who are excluded by major intermediaries. She explained that, to resolve this, an alliance needs to be forged between the producers' organization and a trading partner. To build a successful alliance, it is essential to follow systematic steps but, once this alliance has been achieved, it will lead to a host of positive developments in all areas. She mentioned further key success factors, such as confidence, market access, negotiation and resource management. She analysed the cause of failures that had occurred in order to overcome them and learn from them.

FIGURE 8. Apple crates



© flickr/hint of plum

60. This was followed by a presentation by Mr Paz Silva on *Productive alliances for agricultural promotion*. FAO defines productive alliances as formal or informal cooperation agreements or links between two or more productive agents for coordinating resources, efforts and skills to meet a mutually beneficial common strategic objective. Based on this concept, technological research centres of Peru's Ministry of Production have built partnerships between various public and private institutions to conduct research and provide training in order to bring about technological innovation in branches as diverse as footwear, forestry, timber, agribusiness, vine-growing, camel-hair textiles, logistics, software, fruits, medicines, clothing and fashion design.

61. The third presentation, by Mr Hernan Rojas, discussed *Public policies to strengthen productive partnerships with small-scale agriculture in Chile*. He highlighted Chile as a food and forestry power in smallholder agriculture, which is massive, important, diverse and full of potential, as well as constraints. He added that smallholder agriculture is a feature of all sectors and territories and involves a total of 6 million people, representing 22 percent of the gross value of agricultural production.

Mr Rojas said that everyday experience shows commercial integration of smallholder agriculture to exist but it is fragile, meaning that it is extremely important to improve its competitiveness by strengthening productive partnerships with the rest of the chain, as it is the cornerstone of agricultural policy. To achieve such strengthening, it is vital to upgrade the technical skills of all stakeholders in the chain, to improve their capacity for dialogue and negotiation and to enhance the formal mechanisms for interaction between them.

62. The panel ended with the presentation of Mr Mark Lundy on the *Construction of inclusive business models*. His address concerned the means for building sustainable relationships between organized and trained producers and willing buyers (using private-sector policies) in an enabling environment (public policy/donors).

Round table 4

MARKET ACCESS FOR SMALL AND MEDIUM AGRO-INDUSTRY ENTERPRISES

63. This round table comprised the panellists Mr Andres Silva Mora, Director of the IFAD Rural Opportunities Programme; Ms Paola Perez Alemán, Professor at Canada's McGill University, and Mr Alfonso

Tolmos, Agribusiness Specialist at IDB. The debate was moderated and guided by Mr Carlos Da Silva, Agribusiness Economist at FAO-AGS.

64. The presentation by Mr Silva Mora discussed the case of *Colombia and rural microenterprise development*, where the government is providing access to financial services for rural microenterprises because technical assistance has proved to be an inadequate business development tool. These projects have benefited around 35 000 families, who have improved conditions for producing and marketing their value-added products by building the business capacity of microentrepreneurs, improving competitiveness and integrating their businesses into markets. This has led to the development of small farmer businesses through effective policies for supporting competitive schemes with a business rationale, meeting people's demands and encouraging peer sharing of experience and learning.

65. Ms Paola Perez Alemán spoke about *Small and medium enterprise access: standards, networks and knowledge circulation*. Her address covered products and markets, supply chains and standards. With reference to standards, she emphasized the role of globalization and the use of global quality standards, the technological constraints for organic products and the main challenge represented by the local context of SMEs in Latin America, such as social conditions and child labour.

FIGURE 9. Bread on sale



©FAO/R. Jones

On the other hand, she said that building new networks allows global knowledge to circulate, transferring it to local business practices.

All this can be summarized as active support for facilitating change in production practices, for the operating capacity of local SMEs and for the creation of local and global networks.

Round table 5 AGRO-INDUSTRIAL INVESTMENT AND FINANCING IN TIMES OF ECONOMIC AND FINANCIAL CRISIS

66. This round table included the prominent panellists Ms Nancy Goyburo, Consultant to the EDYFICAR finance corporation of Peru; Mr Ary Avila of the Central American Bank for Economic Integration (CABEI/BCIE); Mr Romy Calderón, Consultant, Latin American Association of Development Financing Institutions (ALIDE), and Fernando Cilloniz, President of Información of Peru. The moderator was Mr Guilherme Schuetz, Agribusiness and Infrastructure Officer, Regional Office for Latin America and the Caribbean, FAO-AGS.

67. The round table was opened by Ms Nancy Goyburo, who spoke on the subject of *Financing agricultural microenterprises*. Her presentation described the environment of agricultural microenterprises and how to support them, considering an agricultural microenterprise as an agricultural household, dedicated to farming, agribusiness and agricultural activities. She emphasized the role of microfinance, which stabilizes the cash flow of farm households during periods of severe income shortage over the year and finances other activities that generate resources to repay the loan, making microfinance more relevant than traditional farm loans

68. The panel continued with a presentation by Mr Avila, who tackled the subject of *Agro-industrial investment and financing in times of economic and financial crisis*, explaining the work of CABEI and its financing programme. This includes the supply chain programme, which suppliers can use to bill their customers electronically. There is also the cofunded trust fund: finance institution/suppliers/government, where the supplier markets the product and repays to the trust fund. The agribusiness strategy of this multilateral development bank is built around three programmes: (i) reducing uncertainty in agribusiness, developing innovative solutions that minimize uncertainty and help to break the vicious circle that discourages investment in the sector; (ii) creating and

consolidating value chains by focusing on developing 'competitive clusters' to overcome problems of low productivity, value added and differentiation; (iii) services, market management and public-private initiatives that focus on such areas as improving poor competitiveness by service providers, complementary investment (research), health modernization and rural development. The main programmes he mentioned seek to integrate suppliers in order to strengthen them and help them grow.

69. Finally, the presentation by Mr Fernando Cilloniz, on *Agro-industrial investment and financing in times of economic and financial crisis*, focused on various aspects of the international crisis, approaching it from the food standpoint. Mr Cilloniz also mentioned current concerns, such as obesity, ageing, water availability, treatment of labour, competitiveness and agricultural subsidies, all of which he believed would need funding. He said that, in the case of Peru, the funding options include commercial banks, investment funds, agro-banks, microfinance and agricultural credit banks. He said there are still challenges to be overcome, such as water availability and use, land, labour, adequate infrastructure, market entry and proper and appropriate management.

Round table 6 PROMOTION AND SUPPORT STRATEGIES FOR QUALITY AND SAFETY MANAGEMENT IN AGRO-INDUSTRY

70. The panellists for this round table were: Mr Miguel Altamirano, VECO Mesoamérica (a Belgian cooperation development NGO); Ms Elvira Ablan, Professor and Researcher at University of the Andes (ULA) in Venezuela; Dr Patricia Ochoa, Chief Executive Officer of TechnoServe, Peru, and Ms Beatrice Tubino, Agro-Exports Manager of Peru's Export Association (ADEX). The moderator was Ms Pilar Santacoloma, Agribusiness Officer at FAO-AGS.

71. This sixth and final round table included a presentation by Ms Patricia Ochoa on *Promotion and support strategies for quality management and safety in agro-industries*.

Ms Ochoa stated that, for this scheme to succeed, it is vital for all stakeholders to work together and for there to be public-private interaction to ensure proper understanding and implementation of quality systems to generate quality products, higher income and diverse markets and so increase revenue for the country. She cited the example of countries like Guatemala, El Salvador, Mexico and Chile, saying

that this produces knowledgeable and coordinated producers, public–private integrated systems and a state that facilitates and empowers the private sector, as well as safeguarding food quality and safety. In turn, it creates a need for organization and training to standardize product quality, which calls for proper training in quality systems and market intelligence.

72. To close this round of presentations, Ms Tubito spoke on the subject of *Peru: a strategic food supplier for the world*. She began by describing the main features of Peru's agricultural exports in 2008, as they account for significant revenue in such markets as the

USA, European Union and Latin America. In addition to Peru's competitive advantages, such as its location in the seasonally dry tropics, intense sunlight, which promotes photosynthesis and enhances the product's intrinsic quality, lack of extreme temperatures or rainfall and a long counterseasonal harvesting period, the country enjoys great diversity. As a result, in recent years it has become the world market leader for fruits, vegetables and organic products, differentiating itself in the market with the label 'Made in Peru', with global certification for food safety and social responsibility that ensure confidence and sustainability and protect the country's image.

FIGURE 10. Employees packaging cabbages



©FAO/G. Napolitano



73. Following the experts' presentations to analyse the key issues, work groups on the topics of the parallel panels were set up to examine the panellists' presentations in more depth.

74. To summarize and highlight the key issues, problems and challenges, there is a political will to achieve competitiveness and development in the region and to ensure the sustainability of research and innovation, bearing in mind that the necessary resources are not always available. The work groups identified the three most important factors for promoting agro-industry: (i) university–business links to include research; (ii) proper coordination of the different stakeholders in the chain and (iii) food safety, innovation and proper training for partnership-building.

In addition, the work groups analysed the biggest challenges to achieving the aforementioned objectives: (i) lack of funding; (ii) lack of clear goals and policies, which is clearly detrimental to small farmers; (iii) lack of human resources and entrepreneurship and (iv) the informal nature of agribusinesses, the gulf between the business and academic worlds, fragmented research by producer organizations and inadequate rural infrastructure

This calls for the implementation of action strategies and mechanisms, such as setting up local and international expert networks, increasing the number of funding organizations (competitive funds), promoting greater and continuing innovation and establishing specialized technology centres or clusters, with active private–public sector participation.

75. In terms of productive alliances, it is important that they develop as models of private–public sector partnerships to help boost competitiveness in ways that develop confidence, increasing access to markets with quality products via producer organizations. What is needed is an enabling environment, by encouraging dialogue to create a win–win situation for everyone involved.

76. Lastly, it is necessary to improve enforcement of rules and standards at all points in the chain, from the start of production to sale or distribution to consumers, ensuring that, at local level, they are consistent with the international market to avoid excluding small farmers. Proper training is crucial for this, including good agricultural, manufacturing, storage, processing and distribution practices. To achieve a reliable chain, preventive measures and critical point analysis systems are needed. This will ensure proper communication and cooperation between public and private stakeholders concerning the main objective of countries in the region – to develop agribusiness by promoting quality, safety and integration.



77. The closing addresses were made by senior government officials who had attended the event alongside the Rector of Universidad Agraria La Molina and Florence Tartanac, FAO-AGS. The rapporteur was Carlos Da Silva, FAO-AGS.

CONCLUSIONS

78. The event included plenary sessions, round tables and work groups to examine multidisciplinary issues relating to agro-industrial development.

79. The importance of institutions in supporting the development of agro-industrial activity was stressed. Special emphasis was placed on the public sector's role in creating a favourable environment for the creation of agro-industrial enterprises and for maintaining their competitiveness. This includes public policy, strong and stable institutions, support services and other mechanisms to facilitate agro-industrial development.

There must be clear and stable rules. This is another key role of the state, in which the private sector must also be involved through strategies such as social and environmental responsibility.

It is important to ensure multisector consultation and participation in policy formulation to promote agribusiness development, in view of the following.

- ▶ The need to formulate and implement different policies for rural and urban SMEs than for large enterprises, facilitating inclusion and ensuring that the impact is more than just economic.
- ▶ The importance of promoting the formalization of rural and urban micro, small and medium enterprises (MSMEs), taking into account their specific realities and their management, financial and technological capabilities.
- ▶ The urgent need to focus development policies on sectors and stakeholders with the potential for achieving the goals of these policies.

Given the large number of policy instruments identified, it is important for them to be accompanied by both management and impact indicators to monitor

and assess their results from an economic, social and environmental perspective. A regional knowledge-management forum should also be established to facilitate experience-sharing, the adaptation of successful strategies and mechanisms and decision-making on the adjustment or reorientation of plans, programmes and projects.

80. Coordination among the stakeholders in chains is another means for fostering the development of agro-industry. There is an awareness that ample opportunity for public-private partnerships exists in areas such as infrastructure investment, research and market promotion, financing, training and technical assistance. There are success stories in Latin America that can be used as models for promoting stakeholder coordination, through mechanisms such as productive alliances, round tables, competitiveness agreements, supply chain councils and other means for facilitating dialogue and consultation.

The importance of universities was stressed, mainly in the challenging task of human resource training to meet the needs of MSMEs and rural agro-industry. In fact, they have significant internal potential for knowledge creation and transfer. It is therefore important to understand the reality of universities and not to demand or expect them to bridge gaps in the regional agrifood system itself.

81. It is vital to improve the quality of food produced by agribusinesses. Complying with safety requirements is a prerequisite for agribusinesses that process food. Compliance with quality standards and rules is crucial to competitiveness and market access.

82. A key remaining task to make the sector sustainable in the region is to develop markets for agro-industrial services. Technical services have weakened significantly in the region in recent years, especially with regard to agro-industrial research centres, which have gradually been disappearing since the 1990s, as well as technology transfer activities, which are significant in countries where funding is available to subsidize their costs.

In terms of financial services, while it is acknowledged that strategies and mechanisms have been developed to extend the coverage of microcredit, there is a need to design, adapt and expand the range of financial products such as trust funds, risk-sharing, risk management, agricultural insurance and microinsurance. The lessons learned in countries that have progressed in this field could serve as the basis for new ventures. Although the provision of business services, such as transportation and specialized warehousing, packaging, logistics, technical and market intelligence, project management and business planning, has grown among large enterprises, it is still a system weakness in rural agro-industry.

RECOMMENDATIONS FOR THE DEVELOPMENT OF A REGIONAL PROGRAMME FOR A COMPETITIVE, INNOVATIVE AND INCLUSIVE AGRO-INDUSTRY

83. Unlike in other regions, the activities considered to be most relevant for inclusion in a programme for Latin American agribusiness relate more to 'software' (knowledge management, stakeholder coordination, capacity-building and support for the formulation, implementation and impact assessment of policy instruments), linked to institutional strengthening and development, than to 'hardware', such as infrastructure, equipment and buildings.

The following recommendations are proposed:

1. Strengthen the technical cooperation commitments (FAO, IFAD, UNIDO) signed in New Delhi during the Global Agro-Industries Forum 2008.
2. Promote consultation between IDB and other funding agencies for the creation of financial mechanisms to support institutional strengthening and the formulation and evaluation of policies to promote agro-industries.
3. Encourage interagency coordination at regional level, particularly among organizations sponsoring the regional forum for Latin America, such as IICA, Regional Unit for Technical Assistance (RUTA), FAO, UNIDO, IFAD, IDB, Economic Commission for Latin American and the Caribbean (ECLAC), ADEX, Universidad Agraria La Molina and other participants, including CIAT and the Guatemalan Exporters' Association (AGEXPORT).
4. Foster the development of a community for agribusiness knowledge and information management in the region to consider such

matters as improving statistical information, documentation and the sharing of experiences of stakeholder dialogue and coordination, as well as measuring and analysing the impact of implementing public policy instruments for development and promotion.

5. Boost cooperation for sustainable and high-quality business development, giving priority to strong interaction and exchanges between the public and private sectors, not only at sectoral level among producers' associations, large enterprises, MSMEs and rural agro-industries but also among ministries, departments, local governments, programmes and projects.
6. Consider planning and developing actions to strengthen: research, development and technology transfer services; food safety and quality management; financing and capitalization; business development and management.

Appendix A

List of participants



BRAZIL

Aline Fernandes

Ministry of Science and Technology

Samuel Giordano

PENSA–Senior Researcher, Assistant Supervisor
Projects

Ronaldo Pérez

Food Technology Department
Federal University of Viçosa

CANADA

Paola Pérez Alemán

Professor at McGill University
Montreal

CHILE

José Miguel Aguilera

International Consultant

George Kerrigan

International Consultant

Eugenia Muchnik

Fundación Chile, Strategy Advisor

Hernán Rojas

National Director INDAP

Guilherme Schuetz

FAO–RLC, Agribusiness and Infrastructure Officer
Coordinator Bionergy Group RLC

COLOMBIA

Antonio Assefh

Representative, UNIDO

Adriana Bello

Manager, Productive Partnerships Project
(*Proyecto Alianza Productiva*)
Ministry of Agriculture

Roberto Haudry

Programme Manager, IFAD

Mark Lundy

Researcher, CIAT

Eleazar Popo Mino

Ministry of Agriculture

Andrés Silva Mora

Rural Opportunities Project (*Proyecto Oportunidades Rurales*), IFAD

COSTA RICA

Marvin Blanco

Agribusiness Specialist, IICA

Saúl Carrera

BANACOL

Rafael Díaz

Director General, International Centre in
Economic Policy for Sustainable
Development (CINPE) of the National University of
Costa Rica (UNA)

María Evangelina Gavarrete

Planning Coordinator, RUTA

Miguel Gómez

Sustainable Rural Development, RUTA

Bernardo Piedra

PROAGROIN

Carlos Pomareda

Consultant, SIDE

CUBA

Debora Río Pombo

Food Industries, Food Industry Ministry (MINAL)

María del Carmen Sabina

Food Industries, MINAL

DOMINICAN REPUBLIC

María Cuevas

Project Officer, IDIAF

Pablo Pérez Fernández

Director Department, Office of the Secretary of
State for Agriculture

ECUADOR

Jorge Madera

Manager National Plan, Ministry of Industry and
Productivity (MIPRO)

Walter Quezada

Agro-industrial Engineer, Kuyay Kawsay
Foundation

Marcelo Silva

Specialist, Ministry of Social Development
Coordination

Ligia Tamayo

Official, MIPRO

GUATEMALA**Iván Buitron Cisneros**

Development Manager, Guatemalan Exporters' Association (AGEXPORT)

Isabel Toapanta

Professor, Galileo University, Director–Ministry

HONDURAS**Ary Ávila**

Analyst, Central American Bank for Economic Integration (CABEI/BCIE)

Edward Moncada

Associate Professor, Zamorano Agricultural University

ITALY**Carlos Da Silva**

Agribusiness Economist FAO

Danilo Mejía

Agro-industries Officer FAO

Pilar Santacoloma

Agribusiness Officer FAO

Florence Tartanac

Agro-Industries Officer FAO

MEXICO**Javier De la Cruz**

Lecturer and Researcher, Veracruz Technology Institute (ITVer)

Rodrigo Diez de Sollano

Director General, FIRCO

Juan Antonio Nevero Muñoz

Industrial Engineering Course Director, Monterrey Institute of Technology and Higher Education (TEC de Monterrey–ITESM)

Deyanira Trujillo

ITESM

NICARAGUA**Miguel Altamirano**

PECOSOL–Regional Coordinator, VECO Mesoamérica

Maria Auxiliadora Briones

Chief Executive Officer, FUNICA

PANAMA**Mitzi Núñez de Medina**

Frutas y Vegetales del Edén

Wedleys Tejedor

Director, Centre for Agribusiness Research and Production (CEPIA) of the Technological University of Panama (UTP)

PERU**Patricia Acosta**

FAO Peru, Lima

Artura Aguirre Ramírez

Banano Orgánico CEPIBO, Piura

Hkalmar Alzamora Covarrubias

Perú INKA SRL. Giant corn by-products, Cusco

Luis Andrade Olazo

Sierra Sur, Arequipa

Laura Angulo

ADEX, Lima

Juan Arévalo Zumareta

UNALM University, Lima

María Gabriela Arrieta Clavijo

Consultant, SNV, Lima

Fabiola Bernardo

FAO Communications–PERÚ APOYO

Marisa Caipo

Professor, USIL University, Lima

Romy Calderón

ALIDE

Luis Calderón Morales

Project Coordinator, UNIDO, Lima

Davis Campos Gutiérrez

Dean, UNALM University, Lima

Fiorella Cano

ADEX

Elvira Carhuaz Peña

SEPAR, Junín

Fernando Carpio Cubas

Acuícola Naylamp S.A., Lambayeque

Jorge Luis Castellón

Project Supervisor, DIREPRO, Cusco

Segundo Rodolfo Chafloque

Director, Sectoral Programme, DIREPRO, Cusco

Jorge Chepote

Manager, Fundo Escondido SAC, Lima

Fernando Cilloniz

Information Advisor

Pedro Ciriaco

UNALM University

Luis Felipe Córdoba Meza

Cultivos Andinos Cereales Acostambo, Hualcavelica

Milagros Coronado

PROMPERU Chiclayo, Lambayeque

Gladys Cusiramos de Reynoso

Licores de Damasco, Moquegua

Guillermo Bernardino De la Cruz Carranza

USIL University

Yahir Delzo Lazo

UNALM University–*Oficina Reinvestigación Académica*

Raquel Díaz

Foreign Trade Specialist, Ministry of Agriculture (MINAG), Lima

Anthony Domingo Díaz Sánchez

UNALM University, Lima

José Francisco Diones Ormeño

CITEVID, Ministry of Production, Ica

Carlos Elías Peñafiel

Food Industry Engineering Faculty, UNALM University, Lima

Jorge Falconi

UNALM University

Gladys Fernando Carpio Cubas

Procesados, Espárragos y Más, Lambayeque

Diana Flores

PDRS GTZ, Lima

Juvenal García

UNALM University, Lima

Vilma Gómez

UNALM University, Lima

Christian Gonzales Espinoza

Head of Training and Technical Assistance, RED PERULACTEA, Lima

Nancy Goyburo

Consultant, EDYFICAR finance corporation, Lima

Carlos Alejandro Guillen Tejada

Executive Director–CITE Tacna

Martha Gutiérrez

Ministry of Production–Competition Directorate

Beatriz Hatta Sakoda

IRD Costa, UNALM University, Lima

Edison Huerta Jahuira

President, OLIVO CEAPO, Tacna

Iván Juscamaita

General Coordinator, RED IDI, Lima

Daniel Laccata

Active Member Producer, APROMIC Quinoa, Puno

Eduardo Lamas Chau

Acuícola Naylamp, Procesados, Espárragos, Lambayeque

Roger Lazo Zapata

Productos Naturales Tallan, Algarrobina, Piura

Laura Linares Gracia

UNALM University, Lima

Mario Ludeña

Manager, Consorcio Tayim, Andahuaylas

Mario Ludeña Ortiz

Lácteos INDERLAC, Apurímac

Fanny Ludeña Urquizo

Dairy pilot plant, UNALM University, Lima

Diego Magno Cantaro

Cooperativa Agro-industrial Tingo Maria, Café, Cacao, Huánuco

Mirtha Patricia Martínez Tapia

UNALM University

Magno Meyhuay Montes

Ministry of Agriculture (MINAG)

Eduardo Morales

UNALM University

Enrique Moya Bendezu

Regional Government, Ayacucho

Dolores Noriega Taricuarima

CONVEAGRO, Ucayali

Patricia Ochoa

Executive Director, Tecnoserve, Lima

Carla Oneto

FAO–Administrative Officer, Lima

Patricia Paulet

UNALM University, Lima

Luis Paz Silva

Ministry of Production–PRODUCE–Advisor to Deputy Minister of MSE, Lima

Jorge Pérez Conza

Asociación de Productores Lácteos, Cusco

Alicia Pérez Pérez

Eco Serranita, Cajamarca

Hernando Riveros

IICA

Ricardo Rodríguez

Professor, Antenor Orrego Private University (UPAO), Trujillo

Elía Rojas

Federico Villareal University

Walter Salas

BANACOL–UNALM University, Lima

Sonia Salas Domínguez

REDAR, Lima

Ivonne Salazar

UNALM University, Lima

Gregory Scott

University of the Pacific (UP), Lima

Cynthia Selk

ADEX, Lima

José Sialer Pasco

Executive Director, Sierra Sur, Arequipa

José Luis Silva

President, ADEX, Lima

Gregorio Silva de Lazo

Productos Naturales Piura, Catacaos

Marco Antonio Sipan

Director, NGO Siembra Andina, Lima

Edilberto Soto Tenorio

Centro de Competitividad, Frutas Nativas, Ayacucho

Juan Ticahuanca

Sierra Sur Asociación de Productores Agropecuarios, Puno

Beatriz Tubino

Agro-Exports Manager, ADEX, Lima

Hubert Valdivia Pinto

Deputy Minister, Ministry of Agriculture (MINAG),
Lima

Edo Van Hasselt Dávila

Chief Executive Officer, Korn Snack, Lima

Juan Varilias

ADEX, Lima

Carmen Velezmoro

Food Industry Engineering Faculty, UNALM
University, Lima

Jaime Vera Huamani

APROPLAME, Arequipa

Moisés Viacava

USIL University, Lima

Hugo Vidal

Agroindustrias Shinka, Pasco

Manuel Villavicencio

FAO, Lima

Wenceslao Villón Cadillo

Barras de Kiwicha Energy Bar, Ancash

Matsukura Watarebe

UNALM University, Lima

Miguel Watts Gonzales

Ministry of Agriculture (MINAG)–Agribusiness
Directorate, Lima

Franci Young Ríos

Agrícola San Juan de la Amazonía SAC,
Camu-Camu, Ucayalí

Freddy Zalazar

FAO, Lima

José Mauricio Zavala Pope

Agribusiness Specialist, Ministry of Agriculture
(MINAG), Lima

Saby Inés Zegarra Samame

Villareal University, Lima

Anna Zucchetti

Consultant, Lima

USA**Alejandro Escobar**

IDB

VENEZUELA**Elvira Ablan**

Chemical Engineer–Professor at University of the
Andes (ULA)

Claudia Bastar

Secretary

SALVADOR**Raquel Calderón**

Agribusiness Technician–Ministry of Agriculture
and Livestock

URUGUAY**Roberto Kreimerman**

Vice-President, Ministry of Industry

Appendix B

Side events held during the forum



DIALOGUE BETWEEN AGRO-INDUSTRIES

During the forum, a dialogue was established between agro-industries to ensure that small, medium and large producers had an opportunity to show and describe their experiences.

Agro-industrial panellists

Luz Mary Tolosa, Colombia

Jorge Pérez Conza, Peru

Mltzi Medina, Panama

Enrique Zamora, Nicaragua

Juan Varilias, Peru

Moderator

Pilar Santacoloma, Agribusiness Officer, FAO Rural Infrastructure and Agro-Industries Division (AGS).

PRESS CONFERENCE

Active dialogue with the media was used to publicize the event, to present the proposals submitted by national and international experts and, lastly, to convey the conclusions on the forum's key themes.

EXHIBITION PANELS, PAPERS AND PRODUCTS BY RURAL AGRO-INDUSTRIES

The forum provided an opportunity for small and medium agro-industrial producers to exhibit traditional and non-traditional products on stands specially prepared for them. They included dairy products, jams and crafts that the producers had made or processed.

Appendix C

Regional agro-industries forum organization team



The city of Lima was selected to host the forum and the FAO representative in Peru acted as national counterpart for organizing the event. Universidad Agraria La Molina was elected as event co-organizer, in collaboration with:

Peru's Export Association (ADEX)

Inter-American Development Bank (IBD)

Economic Commission for Latin American and the Caribbean (ECLAC)

International Fund for Agricultural Development (IFAD)

Inter-American Institute for Cooperation on Agriculture (IICA)

Ministry of Agriculture of Peru (MINAG)

Regional Unit for Technical Assistance (RUTA)

United Nations Industrial Development Organization (UNIDO)

Food and Agriculture Organization of the United Nations (FAO)

Appendix D

Acronyms and abbreviations



ADEX	Peru's Export Association
AGEXPORT	Guatemalan Exporters' Association
AGS	FAO Rural Infrastructure and Agro-Industries Division
ALIDE	Latin American Association of Development Financing Institutions
CABEI/BCIE	Central American Bank for Economic Integration
CIAT	International Center for Tropical Agriculture
ECLAC	Economic Commission for Latin American and the Caribbean
FAO	Food and Agriculture Organization of the United Nations
FIRCO	Shared Risk Trust Fund (Mexico)
FORAGRO	Forum for the Americas on Agricultural Research and Technology Development
GAP	Good agricultural practices
GDP	Gross domestic product
GFAR	Global Forum on Agricultural Research
GMP	Good manufacturing practices
HACCP	Hazard analysis critical control point system
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IICA	Inter-American Institute for Cooperation on Agriculture
INDAP	Chile's Agricultural Development Institute
ITESM	Monterrey Institute of Technology and Higher Education (Mexico)
KOICA	Korea International Cooperation Agency
MIF/FOMIN	IDB Multilateral Investment Fund
MINAG	Ministry of Agriculture of Peru
MSMEs	Micro, small and medium enterprises
NGO	Non-governmental organization
OECD	Organisation for Economic Co-operation and Development
PROCI s	Collaborative Research and Technology Transfer Programmes
PROVAR	Support Project for Value-added Agribusiness using Shared-Risk Schemes (Mexico)
RUTA	Regional Unit for Technical Assistance
SIDE	International Business Development Services (Costa Rica)
SMEs	Small and medium enterprises
SUASA	Brazil's Unified Agricultural Health System
UNALM	Peru's National Agricultural University (Universidad Agraria La Molina)
UNIDO	United Nations Industrial Development Organization
VECO Mesoamérica	Belgian cooperation development NGO

Notes

A series of horizontal dotted lines for writing notes.

Notes

A series of horizontal dotted lines for writing notes.