

Reviews

WTO Negotiations on Agriculture and Developing Countries

A. Hoda and A. Gulati
2007, Johns Hopkins University Press, Baltimore, with International Food Policy Research Institute, Washington, DC, 294 pages, ISBN 978-0-8018-8793-2, £18.50

'What strategy would be in the best interests of developing countries in the multi-lateral trade negotiations?' For developing countries with large rural populations and substantial numbers of low-income consumers that cannot support the agricultural sectors by subsidies and want increased access to export markets, the challenges posed by this question are acute. The authors are two authoritative figures: Anwarul Hoda is a member of the Planning Commission of the Government of India and formerly was a deputy director general of the World Trade Organization (WTO); Ashok Gulati is currently the International Food Policy Research Institute (IFPRI) Director in Asia, based in New Delhi, and before that, was Director of the Markets, Trade and Institutions Division of IFPRI in Washington, DC. The book relies mostly on official WTO and General Agreement

on Tariffs and Trade (GATT) documents, but the authors have been able to draw on data gathered informally and from other studies.

The reader should not lose sight of Hoda's intimate inside view of trade policy and negotiations, nor the authors' interests in developing countries and in India particularly. Nor indeed of the assumption that the continuation of the reform process for international agricultural trade mandated in Article 20 of the WTO Agreement on Agriculture in 1994 is economically desirable. For many developing countries, the case study of India is taken to have important lessons.

The book is academic in style, accessible enough to the specialist interested in international trade issues and agricultural development. For those with negotiating experience, the insights into national approaches and collective experiences will be informative and probably somewhat depressing. The more discursive parts, not least the Introduction (Chapter 1) and the concluding Chapter 9 on a future negotiation strategy are more accessible to the general reader who might want to skim or skip the rest.

Much of the book is a historical account of the various

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rounds of negotiations under the GATT Agreement since 1947. Agriculture had been largely excluded until the ministers of GATT member countries met in 1986 to initiate the so-called Uruguay Round of trade talks, when agricultural trade became a central issue. The intention of the Doha round, which began in 2001 was, inter alia, to take forward the WTO Agreement on Agriculture to liberalize agricultural trade by increasing access to export markets and reducing trade-distorting domestic supports. After many vicissitudes, the talks collapsed in July 2006 in Geneva. Since the publication of the book in 2007, efforts to restart the talks have progressed little, and the global economic and commodities crises have altered the negotiating context; there have been price spikes and food riots; governments have fallen, and agricultural market protectionism, particularly in favour of poor consumers, has resurfaced.

Chapter 1 recounts the collapse of the talks in Geneva in 2006 and the following chapters recount the approaches of major international players to the WTO Agreement on Agriculture. Chapter 2 analyses the antecedents to the Agreement, Chapters 3 and 4 cover the Indian perspective on implementation of the Uruguay Round commitments and the state of Indian agriculture and its international competitiveness. Chapters 5 and 6

examine the implementation of the Agreement on Agriculture by two of the major players, the European Union and the United States. Chapter 7 examines the approaches and commitments of other major players: the emergence of the Cairns Group of major agricultural exporters during the Uruguay Round, and other alliances primarily of developing countries that emerged during the Doha Round and have supplanted the Cairns Group. Chapter 8 brings the reader back to the Doha Round of talks which started in 2001, and ended in Geneva over differences in agriculture. It is said that there were 760 unsettled issues that led to the suspension of negotiations.

It is Chapter 9 that is likely to have the widest appeal, leading as it does to the formulation of 'a viable negotiation position for developing countries'. What elements of the proposals should developing countries put forward in the three areas of market access, domestic support and export competition? Hoda and Gulati assert that because developing countries have a demonstrated comparative advantage in the production of tropical products and can be competitive suppliers to the world, they should aim high.

On market access, they argue that developing countries should negotiate boldly from a position of strength, with the possibility of offering concessions, in order to promote

widespread reduction of support and protection by all countries; they should not enter negotiations with a defensive posture intended to protect their own market restrictions and special and differential provisions; instead, seek equal treatment for all blocs and members.

On domestic support, Hoda and Gulati are less specific. They urge developing countries to persevere in seeking steep reductions in trade-distorting domestic support of the agricultural sector by developed countries – the pernicious effect on African exporters of support to the cotton sector in the United States is highlighted. Strict conditions should be applied where domestic support continues, an exception to which should be input subsidies to low-income, resource-poor farmers in developing countries.

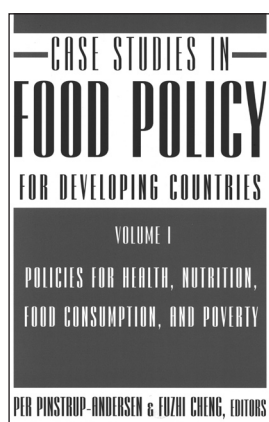
Similarly, they recommend developing countries should argue for an immediate and substantial reduction in export subsidies and financing mechanisms. Interestingly, in a few words they endorse the temporary application of export restrictions in times of critical food shortages, which is one instrument that has been used recently to combat the domestic effects of international price spikes. This is one element of control that can have important livelihood consequences on consumers within import-dependent countries. Had they anticipated the changes in global food markets since 2006,

perhaps Hoda and Gulati would have suggested more caveats to policies that can increase market volatility and damage poor consumers.

If deep reform in the policies of industrialized countries is unattainable, the authors recommend a more combative strategy: take advantage of all the favourable provisions, and seek more; scrutinize the measures employed by industrialized countries, and seek redress for infringements of the existing WTO Agreement on Agriculture; don't succumb to pressure. They end with a sober view: 'A prolonged crisis would be better than a conclusion that perpetuates the existing distortions in world agriculture. Increased recourse to dispute in the WTO could deepen the crisis and induce pressures for genuine agricultural reform' (p. 257).

Trade talks are a complex topic for a largely specialized readership. Nevertheless, the key ideas can be discerned, and the repetition that there is between sections at least serves the purpose of enabling the reader to examine the different chapters independently, dipping in and out at will. In the end, what we learn from the history of slow and incomplete reform is persuasive; time will tell if the preferred constructive engagement in negotiations need give way to the 'no holds barred' alternative.

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Case Studies in Food Policy for Developing Countries: Policies for Health, Nutrition, Food Consumption, and Poverty, Volume 1

Edited by Per Pinstrup-Andersen and Fuzhi Cheng
2009, Cornell University Press,
272 pages, ISBN 978-0-8014-
7554-2, \$24.95

This book is an interesting collection of evidence-based research with pragmatic application. The authors of the 12 case studies, I believe, were carefully selected from varied backgrounds in health, nutrition, food production, processing, and consumption and health education with a point of convergence in policy analysis. Each case study follows a set format with an overview, background, policy issues, policy options and suggested assignments. These carefully arranged case studies present the following questions: why is there a problem, what needs to be done, how can it be solved, who has to do it and where must it be done? This display of expertise makes the food policy case study book a unique one and very interesting to read.

Review of cases

The first chapter on HIV/AIDS, gender, and food security in sub-Saharan Africa gives an elaborate background on why the disease is more prevalent in women than men in

sub-Saharan Africa. Two main reasons given were biological and socio-cultural practices. In as much as women do not have control over their genetic makeup, their lack of knowledge about disease transmission and prevention and existing gender inequalities, which predispose them to disproportionately less power within sexual relationships, must be addressed. The author convincingly argues why it was important to look at HIV/AIDS through the gender lens since that was key to its prevention and to slowing down the disease prevalence in Africa. Food policy and nutrition are arguably fundamental to the prevention, care, treatment and mitigation of HIV/AIDS because food insecurity and malnutrition raise the risks of HIV exposure and infection. These would require multi-sectoral policy options and a multi-country approach to halting the spread of HIV/AIDS. Although the case study was short on food policy analysis it was, however, explicit on the link between HIV/AIDS and nutrition, with recommendations on policies that will enhance awareness of HIV/AIDS among all groups and reduce women's vulnerability.

Chapter 2 is one of my favourites. The case study on food security, health, nutrition and the indigenous people of Costa Rica is very important, with lessons to be learnt for many other indigenous cultures. The author, like many others,

acknowledges that in this era of knowledge-based economic growth, rare indigenous human resources in agriculture and medicine have been untapped for centuries, and it was time to harness this knowledge for accelerated political and socio-economic sustainable development.

One innovation identified was 'agrotourism' where policy options must take account of the livelihoods of indigenous people who derive their food, medicine and energy from the land and whose indigenous knowledge may be appreciated by some tourists. Indigenous people should be involved in active participatory or leadership roles to guide agriculture and health interventions in the most appropriate direction. The policy issues that have prevented improvements in nutrition, health and food security of the indigenous Costa Rican people include inappropriate agricultural interventions, no consideration for women in agriculture, poor integration of health services, lack of knowledge of indigenous people, difficult access to indigenous people and water scarcity.

These policy issues are similar in other indigenous cultures in China, Australia, Bolivia, United States and Canada, among others. The implications of these policy issues on socio-economic development require innovative strategies with well-planned activities by committed

stakeholders pursuing result-oriented implementation plans for proposed actions. Given the issues of agriculture, nutrition and health of indigenous people, possible policy options to improve indigenous food security, nutrition and health were recommended at different levels of government, which require inputs with short- and long-term effects. This chapter is a well-written policy paper and a must-read by all.

Chapters 3 and 4 look at micronutrient deficiencies in iron in Bangladesh and in iron, zinc, vitamin A and iodine in India, respectively. Although these case studies are from two different countries, the policy issues are similar in either country. Both countries acknowledge that 'hidden hunger' is prevalent in at least 40 per cent of the population with women and children being the most vulnerable. There is also an urgent need to collect relevant statistics on the prevalence and effect of micronutrient deficiency and for substantial research and development.

Although there have been numerous interventions to address iron and other micronutrient deficiencies, the gap between people's iron requirements and iron intake has not been closed. This raises some pertinent policy issues. One of the major policy issues is the lack of effective communication by researchers to policy makers

about the importance of micronutrients such as iron, vitamin A, iodine and zinc.

Another challenge is the evaluation of intervention strategies. Chapter 4 provides some of the policy issues and challenges of the Indian Micronutrient National Investment Plan (IMNIP). This plan was put together to influence policies and allocation of budget. The following questions were raised: Why should micronutrient programmes happen – is the case strong enough to justify public expense? When should micronutrient programmes be initiated? What should the micronutrient programmes be? How should the programmes be carried out? Who should be responsible for planning, funding, and administering the programmes?

As a result of these questions, some of the policy options in alleviating micronutrient deficiency such as iron were proposed. The key policy option proposed by both countries to close the gap between micronutrient requirement and intake was to design programmes for supplementation and commercial fortification. Chapter 3 challenges governments and R&D institutions to design studies with potential to reduce micronutrient deficiency.

Bio-fortification of rice may be the solution for Bangladesh as rice containing 400–500

per cent more iron has been developed in the Philippines at the International Rice Research Institute. This will need to be carefully promoted to avoid creating another problem of overdose/overload. Communication initiatives to change behaviour in eating, feeding and other nutrition and caring practices must be pursued. This presents a new area of nutrition communication.

Micronutrient deficiency is a problem worldwide, particularly in developing countries. While East Asian countries are tackling the problem through communication initiatives, South American and African countries are also pursuing this through basic food fortification, bio-fortification through breeding and diet diversification as indicated in Chapters 5, 6 and 7, respectively. These three chapters are well written, giving detailed description of public health and nutrition intervention programmes which must be supported through national government policy backed by international, evidenced-based research and development. Chapter 5 presents a case study on basic food fortification in Dominican Republic; Chapter 6 on biofortification through crop breeding in Benin and Burkina Faso; and Chapter 7 presents a successful case study on pilot bio-supplementation with orange-fleshed sweet potatoes in Kenya.

The authors provide open debate on the need to make choices about the intentional addition of one or more micro-nutrients to processed foods (food fortification) or biological manipulation of crops or food supplementation to increase intake. Food fortification has to be carefully considered because it raises several public health concerns about bioavailability, whether it is justified and required by the majority of the population, how much is enough, what foods to be used, how to go about it, and so on. These public concerns raise many challenges, such as what food is good, what level of investment is required, is the expertise on basic food fortification, biofortification or supplementation available in country or internationally, and how to start, among others.

More evidence is needed to guide policy on issues relating to food fortification, to inform questions such as: how much of a good thing is it? How well assured is the quality? What are the trade-offs compared with alternatives? Is there adequate institutional and human resource capacity and capability? Is there any government support? Who are the stakeholders in the value chain and what are their defined roles? What are the implementation strategies?

The authors of these case studies have elicited the various policy options that were used to

achieve some level of success, with a few options yet to be defined depending on the peculiarities of the countries involved, the exogenous nature of the micronutrient deficiency problem and the availability and support of national government and international cooperation.

One such policy option yet to be defined is monitoring the process and evaluation of the impact with well-defined indicators. Chapters 5–7 are well-written policy papers and must be read together to appreciate the diversity of various policy issues and available options.

As a follow up to Chapters 5, 6 and 7 on food fortification and supplementation, Chapter 8 shows how to communicate these innovations with a case study on Food for Education (FFE) in Bangladesh. The FFE programmes are intervention programmes which provide immediate sustenance for the hungry while empowering future generations by educating today's children, improving dietary intakes and academic performance. These programmes address the two major human development goals – education and nutrition – and other fiscal policy issues such as operational, budgetary, and political economy and effectiveness of these programmes. Policy options to be considered in the implementation of these programmes were also highlighted. Among these are

future design, research and evaluation of the programmes. Pertinent questions to enrich the evaluation of impact are posed to justify recommendation of the Food for Education programme in future.

Chapters 9 and 10 look at case studies in nutrition transition and obesity in China and Chile and tease out the classic effects of rapid economic development, agricultural expansion, urbanization, globalization and technological advancement on food consumption behaviour and nutrition status. For example, the economic empowerment of populations in China has increased household energy intake from fat by 16 per cent while that from carbohydrate decreased by 15 per cent over a 40 year period. Similarly, obesity in Chile has increased by 10.6 per cent over 10 years in schoolchildren, 22 per cent in adult men, with women at child-bearing age at most risk at 25 per cent.

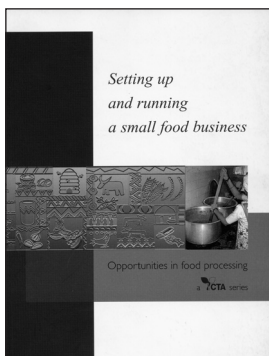
Policy issues identified in these two countries were socio-economic changes, dietary structures and changes in lifestyle, which have contributed to increased energy consumption with a disproportionate decrease in energy expenditure. The result is a high prevalence of obesity with its related chronic diseases and deleterious effects.

Policy options suggested include integrated nutrition intervention, recreational activities to enhance lifestyle

change and public health education. These chapters have provided evidence on the need for new and emerging economies to pursue good public health education to protect their indigenous dietary practices and promote good health and nutrition.

Chapters 11 and 12 caution about food toxins and food-borne pathogens, which create food safety challenges, with examples from all over the world. Included is a case study on aflatoxin, which occurs predominantly in cereals and legumes, and is a causative agent for hepatitis B and stunted growth. *Salmonella* is a bacterial food-borne pathogen, which causes illness of varying severity from mild to fatal. Its control in the Nordic countries such as Denmark is considered to be ahead in food safety by international standards.

Food consumption has always been a concern to both developed and developing countries. While developed countries are concerned more about food safety and its effect on obesity, developing countries are saddled with food insecurity and nutrient deficiency. Notwithstanding, there are policy issues which are key in both cases. These are challenges in setting food safety standards, how to balance food safety and food security, issues of food safety and food trade, harmonizing regional economic block and international food standards, and social



and economic implications for countries.

Several policy options have been provided, such as enhancing food safety to improve health and nutrition while safeguarding against food insecurity in developing countries, transfer of technology and technical assistance from developed to developing countries to help meet food safety standards, and the need for global harmonization to ensure non-discrimination and in adopting market interventions. These chapters form a good basis for ensuring food safety standards and are well worth reading.

Conclusion

These 12 carefully selected case studies ranging from health and nutrition to food production, processing and food safety is unique and a must-read for students, academics, researchers, policy makers, health professionals and the private sector. Individuals who may consider this book as an academic masterpiece are particularly encouraged not to read it as such but rather to consider it as a book which brings out the interplay and interconnection between food, nutrients, health and sustainable economic development.

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Opportunities in Food Processing Series

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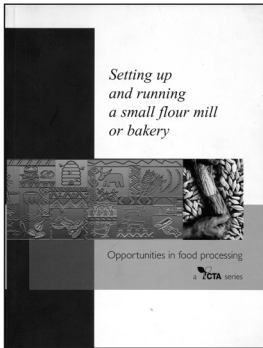
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Fellows, P. and Axtell, B.
2008, ISBN 978 92 9081 377 4
CTA, Wageningen, Netherlands.
All of these books are downloadable for free from www.CTA.int

As an information geek, I am excited by all the online information, often free, I can find on food processing – technologies, equipment, products, techniques and analyses. But there is little support on how to set up and run a business using this information.



This is where Peter Fellows and his collaborators come to the rescue with information in the *Opportunities in Food Processing* series, a collection of five books.

The place to start is *Setting up and Running a Small Food Business*. This 300 page book is edited by Peter Fellows and Barry Axtell, both of Midway Technology Ltd. It uses contributions from 11 scientists and technologists, well known in the food processing sector in Africa.

After a detailed explanation of how to use the book, the first chapter is an introduction aimed at making sure the user has a basic technical understanding of food products and food processes. A trained food scientist would know most of this in theory, but it is still worth reading to get a feeling for what's important in a business environment.

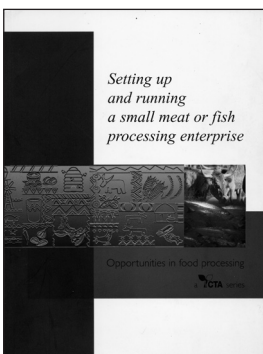
Each chapter in the series is structured in the same way. The information is presented clearly with the support of tables, diagrams and lists. Critical points are highlighted and each chapter starts with 'hints for success' and ends with a summary of the chapter and a checklist, which highlights the particular issues the entrepreneur needs to consider in his or her business.

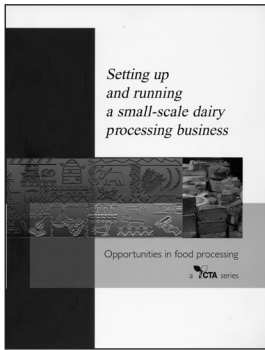
This first chapter, 'Understanding the process', includes information on food composition, microorganisms, food spoilage, food poisoning,

the effects of temperature, water content, air, acidity and light, preservation and processing, and product quality.

The other chapters are:

- 'Selecting suitable products', which introduces feasibility studies, market research, selecting the product and market testing.
- 'Contracting suppliers, retailers and customers', which looks at setting up the agreements and relationships needed to produce a product and most importantly sell it.
- 'Starting production' covers the design and erection of a building, the procurement of services including water, electricity and effluent disposal and the selection and sourcing of facilities, equipment and materials.
- 'Legal aspects' introduces registration of the company, taxation, food laws, food labelling, hygiene and sanitation as well as weights and measures.
- 'Financial planning and management' presents the calculation of costs, the sources of funding, managing finances, producing the necessary financial statements and the things that affect financial plans.
- 'The use of records' explains why records are necessary and gives detailed descriptions of records from





accounting through stock control and personal records to product quality.

- 'Customer care' covers many marketing concepts (including market research, market segmentation, marketing information and marketing mix) but also highlights the difference between marketing and selling. It focuses on selling issues such as packaging, advertising, publicity, promotion, display and sales staff.
- 'Managing the Enterprise' covers the nuts and bolts of running a business such as production planning, scheduling, ordering, maintenance, storage, stock and quality.
- 'Summary for success' lists 17 actions that the authors feel are necessary for the establishment of a successful food processing business.

Four appendices give a very detailed description of business planning, a list of further reading, a list of support organizations and acronyms and a glossary.

What is presented is not some new theory or rocket science. It is straightforward common business sense backed by experience, carefully and comprehensively presented by a group of people very closely involved in the creation

of businesses based on food processing technology.

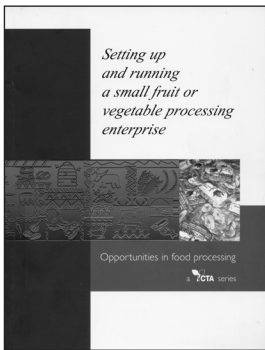
This book would help anyone looking to start a food processing business and is really highly recommended. Its real strength is in the ordered, clear and logical way it goes about getting the information across. There is much food science that is not covered in the book but that's not really the point.

The only thing I can see that it lacks is the technology/information for the particular food a business is going to produce, but this is where the other books in the series come to the fore.

Setting Up and Running a Small Flour Mill and Bakery includes an impressive section on troubleshooting bread making, including a chart with 29 baking faults linked to 24 possible causes!

Setting Up and Running a Small Meat or Fish Processing Enterprise has a nice section on testing shelf-life and setting sell-by dates, which recommends and explains abuse testing.

Setting Up and Running a Small-Scale Dairy Processing Business has interesting information on the fat content of different animal milks, from 1.6 per cent fat for a horse to 8 per cent for a yak. The average for a cow is 3.7 per cent while a



sheep is much higher at 7.9 per cent.

Setting Up and Running a Small Fruit or Vegetable Processing Enterprise gives very good data on losses for different fruits and different processes. It provides many recipes and gives examples of various calculations. Together this gives the business the ability to accurately calculate product costs, which is critical to success and much too often overlooked.

All four books follow the same format as *Setting Up and Running a Small Food Business* with the addition of calculations, flowsheets, diagrams and photographs which focus on the particulars of the product, process, equipment and materials. They provide detailed technical information

through equipment descriptions, troubleshooting, expected losses, recipes and description of ingredients and their role in the process.

Finally the practicality of all the books is enhanced by a large number of case studies which are presented in the words of the entrepreneurs.

I would wholeheartedly recommend these books for entrepreneurs entering food processing, for all those supporting entrepreneurs and for all students to ensure they understand what's involved in the use of the science and technology they learn!

On top of that, although available through CTA on their credit scheme you will find most of them for free online through the links provided in the text.

Dave Harcourt is the former head of Foodtek, South Africa

Resources

The website below contains 15 videos of small machines that are used to make pies, tarts and pasties. The video clips require Quicktime 5.0 or newer (QT), available to download free

from Apple or YouTube videos use Adobe Flash, available to download free from Adobe.

<http://www.johnhuntbolton.co.uk/English/Pages/gallery.html#VIDEOCLIPS>