

FAO Agricultural Policy and Economic Development Series

Syrian Agriculture at the Crossroads

Technical editing by

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Prepared under Project GCP/SYR/006/ITA
“Assistance for Capacity Building through Enhancing
Operation of the National Agricultural Policy Center”



Policy Assistance Division
and
Agriculture and Economic Development Analysis Division

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2003



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ISBN 92-5-104990-4

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FOREWORD

Providing assistance to its Member Countries for the formulation and analysis of their agricultural and rural development policies is a standing mission of FAO. Beyond responding to the countries' requests, policy assistance feeds into the cumulative experience of the Organization which it shares with all others as part of its role in offering a neutral forum to help the international community progress towards a hunger-free world.

FAO's policy assistance is continuously adjusting to the changing conditions under which policies are elaborated. Such conditions include, *inter alia*, the extent and modalities of the role of the state in the conduct of the national economy; the needs and expectations of agricultural producers and food consumers; the increasing extent and sophistication of the links between agricultural production and the downstream processing and marketing chains; the development of international rules and norms related to trade, food safety and environmental concerns; as well as the ongoing progress in science and technology, including information technology.

Cooperation yields most lasting results when Member Countries, at their request, are assisted in developing their own capacity for policy formulation, monitoring and analysis. The analyses reported in this volume are an outcome of a multi-year collaboration of FAO with the Syrian Arab Republic, made possible by the unwavering support of the Italian Government. It led to the establishment of the National Agricultural Policy Centre (NAPC), an institution of a new style in the Syrian Arab Republic. Within the context of the far-reaching process of economic reform undertaken by the Syrian Government, the NAPC is called to play a major role in designing the new policy framework for the food and agricultural sector.

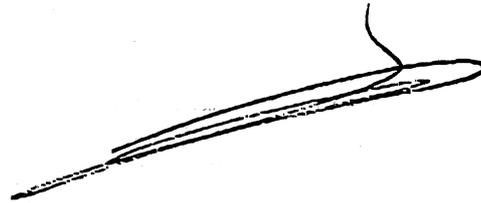
The set of studies summarized in this book have been elaborated under the Italy-funded Project GCP/SYR/006/ITA, operated in the Syrian Arab Republic by the FAO Representation, in the course of the preparations for the establishment of the NAPC. A panel of high level experts from a number of countries elaborated the studies, in collaboration with Syrian experts, as contributions to the national effort towards a reshaped agricultural development strategy. The publication aims at a wide dissemination within Syrian readership, and towards readers from other countries in the Region and elsewhere, who will get a chance of acquainting themselves with the Syrian agriculture sector - one that was, so far, little known outside the borders. Yet the Syrian Arab Republic is one of the very few countries, in the Near East, to have reached food self sufficiency, a strategic objective for the country. The book reviews the conditions that have permitted

this achievement alongside very respectable results in terms of food security and inter-sectoral equity; it underlines the challenges that the country is now facing with a population that continues growing fast, and with environmental constraints that become tighter every day; it addresses the new policy demands of managing the adaptation to a progressively liberalized economy, as exemplified by the decision of the Syrian Arab Republic to request admission to the World Trade Organization (WTO), while preserving the positive social features inherited from the sector's history.

We are confident that the reader will find here fresh information, thought-provoking content, and insights into the prospects for a critical sector in a country in transformation, from which lessons of broad interest can be derived.



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ACKNOWLEDGEMENTS

The authors and editors would like to express gratitude for the generous support received from many individuals whose contribution made the publication of this book possible.

Special thanks are due to Franco Viciani, Senior Project Advisor of the Project GCP/SYR/006/ITA-Phase II, who promoted this publication; Michele De Benedictis, Emeritus Professor at University of Rome “La Sapienza”, who designed the road map for the elaboration of an agricultural development strategy for Syria and conceived most of the background studies on which this book draws; Giovanni Anania, professor at University of Calabria, Senior Project Advisor and Saad El Medani Ahmed, FAO Regional Office for the Near East (RNE), Cairo, Technical Support Officer of the Project, who provided technical supervision to the various stages of elaboration of the studies.

Fundamental has been the contribution of the National Consultants who collaborated with expertise and dedication in the preparation of the background Studies, namely:¹ Mohammed Khazma, Director, Agricultural Economics Department, Ministry of Agriculture and Agrarian Reform (MAAR) (Taxation, Livestock); Yusouf Ismael, Export Committee, Ministry of Economics and Foreign Trade (MEFT) (Taxation); Ghassan Ghadri, Professor, Faculty of Agriculture, University of Aleppo (Livestock); Mohammed Dakkouri, Director, Livestock Production Department, MAAR; Ghassan Habach, Director of International Relations, MEFT (Trade); Hassan Katana, Director, Agricultural Affairs Department, MAAR (Strategic Crops, Citrus); Ghatfan Al Azm, Director, Storage and Marketing Department, General Establishment for Cereals Trade and Processing (Strategic Crops); Yousef Hussein Kasim, Transport Department, General Establishment for Cereals Trade and Processing (Strategic Crops); Mohammed Zein El Din, Director, Directorate for the Economic Sector, MAAR (Marketing and Processing); Barakat Chaheen, Director, Directorate for the Private Industrial and Handicrafts Sector, Ministry of Industry (Marketing and Processing); Nouredin Mona, Professor, Faculty of Agriculture, University of Aleppo (Land Tenure); Mustafa Darweesh, Professor, Faculty of Agriculture, University of Aleppo (Land Tenure); Dergham Fallouh, Advisor, MAAR (Land Tenure); Mohammed Darmoush, Director, State Properties Department, MAAR (Land Tenure); George Somi, Director, Department of Irrigation and Water Use, MAAR (Water); Munther Kustantine, Deputy Director of Maintenance and Exploitation at Ministry of Irrigation (Water); Nahi Shibani, Director, Planning

¹ The functions of the officials are those at the time they contributed to the background studies, whose respective subject is abbreviated after each name.

Department, MAAR (Inputs, Strategy); Shahab Nasier, Director, Statistics Department, MAAR (Inputs); Wageeh El Moue', Director, Citrus Board, MAAR (Citrus); Mohamed Karabeej, Director of Olives Bureau, MAAR (Olive Oil); Malek Abdeen, Deputy Director of Olives Bureau, MAAR (Olive Oil); Fayez Al Asfari, private oil miller (Olive Oil); Mustafa Dawwa, Director, Credit Department, Agricultural Cooperative Bank (Credit); Sae'ed Akel, Deputy Director, Credit Department, Agricultural Cooperative Bank (Credit); Haitham Haidar, Deputy Director, Planning Department, MAAR (Credit); Mohammed Ali Alzein, Deputy Director, Irrigation Department, MAAR (Environment); Abdullah Masri, Rangeland Specialist, private sector (Environment); Abed Alrazak Nokta, Soil Department, MAAR (Environment); Hamad Abido, Professor, Faculty of Agriculture, Damascus University (Environment); Mohammad Ali Khalaf, Deputy Director, Investment Office (Investment); Husam Murad, Professor, Faculty of Economics, Damascus University (Investment); and Zakarya Fadlieh, Professor Faculty of Agriculture, Tishreen University (Citrus).

The work has also involved participants in the Training Program delivered under the Project, who have in particular contributed to data collection, surveys, data elaboration, and other precious tasks:

Abdul Hadi Reffai, Abdul Hameed Madani, Abdul Rahman Nasmeh, Abdulla Saa'di, Abeer Munla Hassan, Afra Dughman, Ahmad Dmairieh, Akram Shhaideh, Almuhammad Melhim, Amal Naba'a, Baibars Abaza, Basel Al Bawwab, Bashar Nahas, Basima Atiya, Fayez Mansour, Ghada Masri, Ghassan Ghannoum, Ghassan Jbara, Ghassan Nassour, Ghusaina Khaddour, Haitham Al Ashkar, Haitham Shawwa, Hajar Baghasa, Jameel Helwani, Jihad Mukdad, Lina Soukkar, Majd Abdullah, Mayada Hammoud, Muna Hallak, Nabeel Kiwan, Nadia Toubeh, Nazhan Mousa, Rwaida Hasbani, Rweida Hasbani, Sabah Abu Kalam, Salaheddin Saker, Saleh Toman, Samar Abbas, Samar Dmairieh, Sameer Mulki, Samer Braigleh, Samir Jrad, Samira Zeghbi, Tarek Jawabra, Usama El Saa'di, Waficca Hosni, Walid Hamzeh, Widad Shehadeh, Yihia Dehesh, Zainab Abu Ras.

The entire undertaking would not have been possible without the keen and professional support brought to the preparation of the Studies and to the final elaboration of this Volume by the Syrian and FAO staff in charge of managing and supporting the Project. In this regard, special thanks are due to Atieh El Hindi, Director of the National Agricultural Policy Center (NAPC), whose professionalism and dedication proved invaluable assets in carrying out the studies; to the support staff of the NAPC Maha Horani and Najila' Moughra, secretaries, and Mo'taz Homs, librarian; as well as to the staff of Project Emad El Hawary, Chief Technical Advisor; Ciro Fiorillo, Agricultural Economist; Maisa Al Taji and Shahed Alloush, secretaries; Raja Al Awwa, administrative assistant; Asma Matar, Rola Diab, and Lina Bitto, assistant translators; Nasouh Keilani computer technician; and Mazen Boukai and Suheil Mayla', drivers.

Many other FAO professionals and consultants contributed in various ways to the studies. A non-exhaustive list should at least include Dyaa Abdou, Chief, Policy Assistance Branch, FAO-RNE, Cairo; Zohair Abdalla, Senior Agricultural

Marketing and Rural Finance Officer, FAO-RNEG; Fabrizio de Filippis, Professor, University of Rome 3, and FAO Consultant; Pal Hajas, Senior Country Project Officer, FAO-RNER; Otte Joachim, Senior Officer (Veterinary Services), Animal Production and Health Division, FAO-Rome; Mustafa Nosseir, Country Project Officer, FAO-RNER; and Salim Zahaoueh, National Program Officer, FAO-Syria.

Special thanks are also due to Maria Grazia Quietì, Senior Agricultural Policy Support Officer, Policy Assistance Division, FAO-Rome, and Mahmoud Taher, FAO Representative in Syria, whose enthusiastic and dedicated guidance has highly facilitated the realization of this publication.

Last but not least, deep gratitude is expressed to the hundreds of Syrian officials, experts, practitioners and managers from the MAAR, and other public and private institutions which it would be impossible to mention individually. They contributed in a number of interviews and workshops irreplaceable information and understanding to the analyses by the consultants in charge of the studies.

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the ability to attract foreign investments, modernizing the public administration, and promoting competitiveness on the international market in such a way as to accelerate growth of income and employment. Part of this process are the reforms of the exchange rate regime and currency use regulation, the simplification of the tariff system, the enhancement of investment promotion, the new legislation to promote small-scale investments and employment, the reform of the banking system allowing the creation of private banks, as well as the proactive stand in the negotiation of an association agreement with the European Union (EU) and the application for membership in the World Trade Organization (WTO).

Throughout these decades, agriculture and rural welfare remained a central concern for Syrian economic policy makers, even though the specific objectives and instruments of sectoral policies have substantially evolved. The traditional focus on agrarian reform and large-scale public investments accompanied by rigid production planning, public price fixation and state procurement, has been gradually, but consistently shifting on promoting the role of farmers and other private agents in marketing and processing. The turning point can be identified in the second half of the 1980s, when the large-scale investment launched during the previous decades, especially in irrigation and land reclamation, started entering production. The consequent enlargement of the production base coincided with a turning point in agricultural policies in line with the changing orientation of broader economic policies. From the late 1980s to mid 1990s, gradual phasing out of agricultural input subsidies was accompanied by a substantial increase in prices for main crops, and the gradual relaxation of agricultural planning. Annual agricultural plans have been prepared adopting a more participatory and decentralized approach, while enforcement increasingly relied on economic incentives. In this way, while the State retained a central role in the direct coordination of resource allocation, space was gradually opened for private activities in production and trade. As a result, the traditional objectives of agricultural policies, directed at full utilization of natural and human resources and securing adequate supplies for food security, processing industries and exports, have been gradually evolving over the last decade and, particularly, the last few years, as follows: gradually shifting from strict self-sufficiency to a broader objective of self reliance; recognizing the critical role of marketing and processing for competing at the international level; and increasing concern for the environmental constraints, especially the necessity to preserve and use efficiently the scarce natural resource including land and, above all, water.

In the future Syrian agriculture will face several challenges as result of domestic factors, population growth, greater urbanization, new food habits, and external factors associated with a greater opening to the outside economy. These will require that Syrian farmers improve quantity and quality of their produce, while coping with emerging shortage of water and declining quality of soils and grazing land. Farmers' revenues are also at risk, due to the limited size of most farms and growing competition from import that will also challenge domestic agro-industry. These call for a higher degree of flexibility in resource allocation at the farmers and sectoral levels, which, in turn, requires enhanced ability to adapt institutions and policy making to the changing scenarios. At this crossroads of Syrian's

agriculture history, the analysis of risks, opportunities and policies in meeting these challenges, while preserving the social achievements inherited from the past, is the subject of the papers assembled in the present volume.

Sketch of the contents of the book

The papers in this book have been elaborated by authors who contributed between 1999 and 2001 to an FAO-Italy technical assistance project⁴ supporting the establishment of a National Agricultural Policy Center (NAPC) in the Ministry of Agriculture and Agrarian Reform (MAAR). The papers are presented under three main parts dealing respectively with: i) the agricultural sector in the Syrian economy; ii) the economics of the major sub-sectors in Syrian agriculture; iii) the structural and institutional features of inputs markets and production factors for Syrian agriculture.

The five chapters in **Part One** of the book illustrate the conditions and contributions of the agriculture sector in the national economy, i.e. the macroeconomic environment of agriculture; the sector's external trade and impact of trade agreements; the situation and prospects for private investment in agriculture; the fiscal flows and financial transfers resulting from applied policies; and selected important environmental issues for agriculture.

The analysis of the macroeconomic context for agriculture is presented by Alexander Sarris⁵. The Syrian Arab Republic has experienced since the 1960s a fairly high rate of growth (4.6 percent per year between the end points 1963 and 1999), which however did not exceed much the population growth rate (3.3 percent per year) over the same period. Agricultural GDP grew slightly less, remaining by the late 1990s at the same level, per capita, as in the early 1980s. Nevertheless, agriculture remains a major sector of the Syrian economy: nearly 30 percent of the GDP, a share which has kept stable despite the overall growth in the economy. The dominant factor of change in the macroeconomic context has been the steady evolution of the planning system towards greater openness and flexibility, with particularly important consequences through an exchange rate regime becoming simpler and closer to market conditions, and a greater opening to private initiatives and foreign economic relations, thus paving the way for an easier adaptation of the Syrian economy and agriculture to the fast evolving domestic and international context.

The extensive degree of state control on foreign trade has served considerably to ensure protection of the agricultural sector. Syrian agricultural trade is modest compared to the size of the sector, showing a clear preference for self-sufficiency; this is not a pattern that can be abandoned easily, especially since competitiveness had not been a priority in past policies. Yet the Syrian Arab Republic has decided

⁴ GCP/SYR/006/ITA, a project initiated in 1998. The set of the original studies conducted by the authors and others for the Project is available on the Project's web site and CD-ROM.

⁵ Chapter 1: Agriculture in the Syrian Macroeconomic Context.

to move outward and to seek WTO accession. Negotiations are under way for an association agreement with the EU. J.M. Alvarez-Coque⁶ explores the opportunities and challenges of such an agreement. Although the country has important relations with neighbouring countries and concluded a set of bilateral or regional (Arab Free Trade Area) trade agreements, the EU is a significant partner for Syrian agricultural trade (13 percent of Syrian exports, 27 percent of imports) and the issues raised by the perspective of a greater opening to economic relations with Europe – generally a major partner for Mediterranean countries – are well illustrative of the type of problems that trade liberalisation presents to countries engaging towards liberalisation and of the potential positive and negative impacts of opening to globalisation.

The issue of investment is tightly linked to that of trade. Hector Maletta⁷, noting that sustained economic growth requires a new impetus for investment – for instance in agriculture irrigation and agribusiness - analyses the policies followed and conditions for private investment development. After a period of nearly total state control, policies in the 1990s have encouraged private investment, notably in agriculture, industry and trade. Two-hundred and fifty (250) projects have been implemented in the agri-food sector, generating growth and balance of payment benefits, and to a lesser extent employment and income gains. But procedures for business and trade remain complicated and uncertain. Joint ventures have been largely confined to the hotel sector. In a still rigid system, on its way to becoming gradually friendlier, private investment has been largely dependent on the short-term incentives given by the Investment Law, rather than on the long-term expectations which a stable set of rules-of-the-game would create. The legislative framework and the business related practices, therefore, need to be more profoundly adapted for investment in the Syrian Arab Republic to become a credible avenue for private capital – domestic or foreign.

Under a system of central planning and widespread public interventions, the balance of their impact on agriculture is complex. Peter Wehrheim⁸ explores the resulting picture of economic transfers between agriculture and the rest of the economy in the 1990s, and how it has evolved in the course of the process of reforms under way. The analysis considers exchange rates policies, market price support, inputs, credit and consumers subsidies. Overall, the total net support to agriculture is estimated to have moved from 30 percent of the gross agricultural output at the beginning of the decade, to some 10 percent by the end, showing a significant impact of the reforms. Within a sector that generally has been protected, distortions have led, as is frequently the case in controlled economies, to protection in favour of less competitive products, while those with comparative advantage are taxed and cannot reap their full potential. Particularly detrimental to sustainability, insufficient water saving incentives lead to extensive waste of a precious resource.

⁶ Chapter 2: Trade and Agriculture: Perspectives for the Association Agreement with the European Union.

⁷ Chapter 3: Private Investment in Syrian Agriculture and Agribusiness.

⁸ Chapter 4: Agricultural and Food Policies in Syria: Financial Transfers and Fiscal Flows.

Although water is indeed a critical environmental issue in Syria, it is not the only one. Gareth Edwards-Jones⁹ analyses the other main challenge to sustainability of the sector: soil conservation and management, exemplified by the degradation of the Syrian steppe (“al Badia,” comprising 55 percent of the land mass of the country). The worrying situation in the Badia steppe, with less than 200 mm rainfall, is the result of compounding pressures, dominated by the widespread overgrazing (the number of sheep has been multiplied five times since 1950) and amplified by certain support policies: wells and subsidised feed, to combat the consequences of frequent droughts, and restrictions on sheep exports (to preserve the precious Syrian Awassi breed) lead to over-exploitation of the vegetal resource by flocks too large in number and grazing too long. Restoring collective responsibility by users over their resource is a condition for sustainable range management, even more so since the state's withdrawal from certain functions may facilitate the spread of unsustainable behaviours.

Part Two of the book examines the economics of the main sub-sectors in agriculture. The five chapters deal respectively with the Syrian “strategic crops,” which remain subject to government planning (although more flexibility is being introduced), and with other important sub-sectors (Olive and Olive oil, Citrus, and Livestock). The remaining chapter examines the processing and marketing activities, with particular attention to the dairy and horticulture sub-sectors.

The first chapter, by Michael Westlake¹⁰, analyses the so-called “strategic crops” for which the Government continues to set producer prices and generally runs the related processing and marketing. Wheat and cotton are by far the most important of these crops in terms of farm-gate value, employment and the use of irrigation water. Cotton, tobacco, lentils and chickpeas generate net exports; sugar is a net imported crop; wheat production is normally in balance with domestic consumption, while barley generated mostly a net export surplus in the 1990s, but for the recent drought years. Only lentils and chickpeas are farmed under profitable conditions at international parity prices; all other crops would be unprofitable at normal levels of yield, were it not for the high degree of price support provided. High domestic prices are also handicapping the transformation of the product, such as in the cotton industry. The strategic crops sub-sector generates high costs (the cumulative loss of the public organisations in this sector amount to some 4.5 percent of GDP) but would be severely resized for protected crops (wheat, cotton, sugar beet, tobacco) if government planning would be released. Control of the cropped areas is also used to check irrigation water consumption in the absence of a charge for water use. Reform of this sector therefore represents a major challenge both for public finance, and for employment and income in rural areas, as well as for the pursuit of the food security and environmental objectives of the Syrian Arab Republic.

⁹ Chapter 5: Agriculture Policy and Environment in Syria: the Cases of Rangeland Grazing and Soil Management.

¹⁰ Chapter 6: The Economics of “Strategic Crops”

Ivan Malevolti¹¹, in the following chapter, observes that the Syrian Olive Oil sector has been developing over the past decade a steadily growing structural surplus, with the fast growth of production (+76 percent in ten years) far outpacing the growth in domestic demand (+ 28 percent). Handling of this surplus obviously points to an aggressive export policy, and the study carefully analyses the international markets for olive oil, which the Syrian Arab Republic would face for this purpose. Olive and olive oil production and marketing in the Syrian Arab Republic call for a host of improvements in the sector's structure and performance: prevailing domestic prices are above international prices; quality indicators along the field-to-market commodity chain reveal a number of weaknesses, not the least of which are inadequate norms and standards; the sector's operation is distributed among a large number of small-scale actors; and experience in the export business is basically lacking. The prospects for an exports marketing board for olive and olive oil are carefully analysed, as a potentially adequate instrument for managing the transition towards the needed opening to external markets.

M. Westlake¹² next analyses the citrus sector, which is contributing 20 percent to the export proceeds of fruits and vegetables in the Syrian Arab Republic. On irrigated schemes especially, natural conditions give great potential for expansion of citrus production, which is currently concentrated in the coastal region of the Syrian Arab Republic. But the downward trend in citrus domestic prices, principally determined by the confrontation of domestic supply and demand, gives rise to concern about a production surplus. A profitable development of the sector depends upon efficiency improvements all along the commodity chain – export efficiency to improve proceeds from this business; processing and marketing efficiency to transmit better prices to the producers; and citrus farming efficiency. A critical role for Government rests in fostering better grading, preparation and packaging norms and practices as a condition for successful entry into the most promising markets.

The following chapter¹³, a résumé by Jacques Vercueil from a study by Gary Cummins, discusses the important growth potential of the livestock sector, which already accounts for 15 percent of the value of agricultural exports, and 11 percent of the total labour force in the Syrian Arab Republic. While livestock is a major consumer of crop products for feed, agricultural policies have consistently favoured the crop sector. The paper discusses the new support approach, which is required to account for the complex relationship between the livestock and crops sub-sectors, in the context of environmental sustainability, which is particularly threatened in the dry areas. Cattle and dairy production compete directly with crops for land and water. Sheep production, in contrast, occurs predominantly in areas where crops and cattle are not viable. However, cropping also encroaches upon pastoral lands, and as sheep numbers augment, competition with other animal products takes place for crop residues and concentrates. The relevant

¹¹ Chapter 7: The Syrian Olive Oil and Table Olive Sub-Sectors

¹² Chapter 8: The Citrus Sub-Sector

¹³ Chapter 9: The Livestock Sector and Policies in Syria

upstream and downstream activities for feed and fodder supply, animal products marketing and processing, trade and support services are also examined.

Daniele Rama¹⁴ comprehensively studies the marketing and processing system for Syrian agriculture, with special attention to the non-"strategic" sub-sectors. The low degree of outward orientation of the country is manifested in: the narrow geographical diversification of export markets, mostly directed to neighbouring countries; in the prevalence of one-way commodity trade flows; and in the use of production expansion as the main instrument for export development. In analysing the pre-marketing conditions for the development of an efficient supply chain, the demographic and consumption patterns, and technological developments in agriculture, the paper discusses foreign trade and international agreements, alongside the Government's agricultural planning and price regulation system and its investment policy. The many agro-food operators - farmers, cooperatives, agricultural chambers, credit and input suppliers, state and private agricultural and food companies in processing, distribution and trade - are reviewed in relation with their preparedness for a competitive environment; the vertical coordination mechanism is examined in particular detail for the fruit and vegetable (fresh and processed) and dairy sub-sectors. Policy implications are derived with respect to horizontal and vertical organization, provision of services, removal of constraints, prospects for privatisation and improvement of the business environment.

Part Three of the book examines the structural and institutional factors that command the patterns of availability and use or misuse of the production factors and inputs for agriculture production in the Syrian Arab Republic. The five chapters respectively discuss the diversity of agriculture producers in the sector, the land tenure and labour relations in rural Syria, the irrigation water policies, and the inputs and credit supply and distribution systems.

Alexander Sarris and Alessandro Corsi¹⁵ depict, on the basis of census data complemented with farm-household surveys, the size distribution and labour and capital endowments of agricultural holdings, and analyse their relation with farm income, production, and access to inputs and services. Conclusions are derived with respect to the perspectives of evolution of Syrian farm structures and agriculture production in the context of domestic policy reforms and overall economic change. Despite an intended legalistic policy, existing symptoms of uneven access to factors make the contribution of the rural development policy to reduction of poverty a topic worthy of consideration.

In the next Chapter, Nadia Forni¹⁶ investigates the multifaceted relationship between people and land in the Syrian Arab Republic, where customary and formal legal systems are co-existing. The state, the ultimate owner of a large part of the country, also has a critical role to play as arbiter in privately owned lands.

¹⁴ Chapter 10: Marketing, Processing, and the Special Cases of Dairy Products and Horticulture

¹⁵ Chapter 11: The Syrian Agricultural Producers: Structural and Distributional Features

¹⁶ Chapter 12: Land Tenure and Labour Relations

The population pressure that has been mounting in recent decades calls for better definition of rights and duties; informal conflict resolution at the grassroots level would help resolve issues between legal and *de facto*, actual and would-be users of land. Another consequence of population growth is the increasing number of landless agricultural households, including numbers without fixed employment. Most agricultural wage labourers are females, men resorting more easily to foreign labour markets commanding better wages. While traditional labour organisations are efficient, enrolment is partial only, and unregistered workers are more vulnerable to economic change. Development of rural off-farm employment will be a necessary complement of agricultural policy reform to ensure the lasting viability of the rural economy.

Water, even more than land, tends to become the critical production factor in many regions of the world, and has reached this stage in the Syrian Arab Republic already. Consuelo Varela-Ortega and Juan Antonio Sagardoy¹⁷ show that water scarcity in the Syrian Arab Republic is an increasingly serious concern for public authorities, as future demand for water will surpass available resources. The need to increase water use efficiency in agriculture is at the centre of the nation's water policy discussions. Irrigation expansion has mounted over the past decades to comply with the food security objectives and food production needs. At present, water policies combine the expansion of irrigation with the attainment of a sustainable use of water by increasing technical efficiency: modern irrigation technologies at farm level benefit from considerable government support. In this context, the study analyses irrigation and water policies in Syrian agriculture at the national and basin's level and at the farm level. Simulations of several scenarios permit short- and long-term analyses of different policy alternatives for conserving water resources. Results show that sustainability will be reached in the medium term only if irrigation modernisation is coupled with a limited and selective expansion of irrigated areas. Demand management and the introduction of incentives, such as water-crop quotas or tariffs, will be necessary to attain water conservation objectives.

Agricultural inputs and credit are marked by very extensive government interventions, analysed in the two successive papers by N.S. Parthasarathy, based on investigations which involved all types of stakeholders at different levels in the sector.

In the context of agricultural inputs¹⁸, the reform process comprised as particularly relevant factors of change the unification of exchange rates, private sector entry into certain areas of agricultural procurement, reduced rigidities in crop planning, removal of explicit subsidies, and relating price fixation to costs of production. Fertilizers are produced (60 percent) or imported by public companies, with private agents active only at the retail level, under a system of crop licensing that commands access to, and credit for, fertilizers. Seeds also are mainly produced by government agencies for the strategic crops (centralised

¹⁷ Chapter 13: Irrigation Water Policies in Syria: Current Developments and Future Options.

¹⁸ Chapter 14: Agricultural Inputs and Market Liberalization

production seems to lead to under-utilisation of the production capacity), while private dealers import and distribute reproductive material for the rest of the sector; a seed law would become necessary as private agents gain a greater stake in the business. In contrast, the authorized entry of private agents in the market of agricultural chemicals has led to a steady growth of this sector, although quality enforcement at field level is considered weak by private operators. The extension system, entirely public, has played an important role in the modernisation of Syrian agriculture, but the private sector's contribution to technological information for farmers will need to be addressed as part of the reform process, as shown by the example of chemicals. Overall, implicit subsidies to the input sector can be analysed as beneficial for three-quarters to the producers, and one-fourth to the supplying sector.

To an even greater extent, the financial sector¹⁹ is entirely run by public entities. The system is marked by strict segmentation, each of the five specialized banks (for agriculture, industry, commerce etc., all under the aegis of the Central Bank of the Syrian Arab Republic) having lending domains and administratively eligible clients. The result is a fairly rigid system, with a strong dependency on subsidization compensating for one-fourth for lowered interests and for three-quarters for high transaction costs. It is noticeable that credit users aspire to better service and access rather than lower credit costs. On the other hand, savings mobilisation is under-exploited, banks wanting the freedom to develop their own savings mobilisation strategy. In the up- and downstream sectors, the low rate of funding on approved investments, and the importance of high cost private funding, illustrate the poor impact of such policy on the modernization and competitiveness of the Syrian productive sector. In agriculture, a small part only of credit is used for medium- and long-term, preventing a sufficient rate of progress in technology and modernisation. As a result, priority areas for investment in the agriculture strategy are not particularly sustained. The paper exposes the benefits to be expected from further reform in this sector, and discusses the way in which a smooth transition with minimum social costs can be implemented so as to make agriculture and its up- and down-stream sectors benefit from the indispensable finance dynamics needed for its successful progress.

Overall, the papers show that the margin of progress embodied in the removal of the residual constraints inherited from the past pattern of policies is considerable, and holds great promises for a successful adaptation of Syrian agriculture to a more open and competitive environment. The reform process undertaken more than a decade ago has been conducted cautiously with a clear concern to avoid the economic and social disruptions that have, in many other countries, caused great losses and suffering. Yet a delicate balance needs to be found in the pursuit of the reform, between the preservation of some remarkable achievements of the past, and the necessity to provide producers and investors in the agriculture and related sectors with the degree of freedom needed to achieve the dynamic transformations of the production, transformation and marketing of agricultural

¹⁹ Chapter 15: Agricultural Credit System: Institutions and Policies

produce called for by the fast evolving domestic and international environment. "... the appropriate role of the state in agricultural development is an empirical question which requires sophisticated policy analysis to determine in each particular setting. Every country is different ..." and "... market failures and government failures are empirical issues that depend on local circumstances ...".²⁰

²⁰ Peter Timmer (ed) 1991. *Agriculture and the State. Growth, Employment, and Poverty in Developing Countries*, Cornell University Press, Ithaca and London (p. 24 and 291).

