

Ministry of Agriculture and Agrarian Reform

NAPC

National Agricultural Policy Center

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Introduction

A National Agricultural Policy Workshop was held in Damascus on the 12th of January 2002 under the auspices of H.E. Dr. Nouredin Mona, Minister of Agricultural and Agrarian Reform.

The Workshop represented an important benchmark in the activities of the project “Assistance for Capacity Building through Enhancing Operation of the National Agricultural Policy Center”, executed jointly by the Ministry of Agriculture and Agrarian Reform of the Syrian Arab Republic (MAAR) and the Food and Agriculture Organization of the United Nations (FAO), with funding provided by the Italian Government.

The Workshop was organized to disseminate and discuss, in a national forum the results of three major studies prepared in the course of the project activities: “Implications for the Syrian Agricultural Sector of a Possible Co-operation and Trade Agreement with the European Union”, “The Utilization of Water Resources for Agriculture: Analysis of the Current Regime and Policy”, and “A Strategy for the Development of Syrian Agriculture”. It also offered an opportunity for informing a wide audience on the salient features of the project, currently in its second phase, and of the National Agricultural Project Center (NAPC), which has been established by the Ministry of Agriculture and Agrarian Reform, and is being set up with support by the project.

The programme of the Workshop (see Annex 1) included an opening ceremony, a short session presenting the activities of the Project and of the NAPC, and a session for each one of the three studies presented. Attendance to the workshop (see list of participants in Annex 2) included policy makers and public officers from all main departments of the MAAR, other Ministries and various Public Establishment, Members of the Parliament, academicians from various Universities, stakeholders from the private sector and representatives of various professional and non-governmental organizations, and representatives of International Organizations and Embassies.

Background

The Syrian economy, characterized for many decades as centrally planned, has witnessed an evolution in strategic thinking and policy regime towards domestic liberalization, greater reliance on market forces and increased compliance with, and integration into, the international economic system.

A policy of gradual reform has been contemplated since the mid-1980s, starting with a move from central to indicative planning. Since then, a number of Government actions in form of legislative measures, revision and amendments of the major instruments of public intervention and wider economic and institutional reforms were taken both at the macro and agricultural sector levels. Some of these measures include the gradual unification of the multiple exchange rates and liberalization of the trade

regime through a gradual increase in the role of the private sector, the authorization of private banks, and legislation for the promotion of private investments. Agricultural sector policies have been moving from a self-sufficiency to a self-reliance approach, by adjusting domestic prices toward international prices, redistributing state farms land to private owners, downsizing price control mechanisms and Government involvement in marketing inputs and outputs while promoting the role of private agents.

The current policy orientation in the country is to proceed along the road of further reforms, and to design and implement these reforms in greater depth and at an accelerating pace. This is recognized as a necessity to reap the potential opportunities offered on several fronts by the more open attitude toward world markets and by reinforced external relations. Some of the indicators in these directions are: the progress in implementing the agreement to establish the Arab Trade Free Zone; the conclusion of bilateral trade agreements with Arab countries; the progress toward concluding the Syrian European Association Agreement; and the efforts made in assessing the implications of Syrian accession to WTO.

In the light of the pursued policy reforms, the Government of Syria requested assistance to strengthen its technical and institutional capacity to analyze, formulate, and monitor sustainable agricultural policies under an open market-economy scenario. The Government of Italy positively responded to this request providing technical expertise and generous financial support through the FAO/Italian Government Cooperative Program for two projects implemented by the Food and Agriculture Organization of the United Nations. A first project, GCP/SYR/002/ITA “Assistance in Agricultural Planning, Policy Analysis and Statistics”, was implemented between June 1995 and September 1996, focusing on the development of policy analysis capacity of the Department of Statistics and Planning of the MAAR.

The present project, GCP/SYR/006/ITA started its operation in April 1998. The first Phase of the project, denominated “Assistance in Institutional Strengthening and Agricultural Policy”, was completed on October 31st 2001. It focused on supplying international technical assistance to support the national agricultural policy analysis capacity, while providing the training and institutional support needed for establishing a national institution, the National Agricultural Policy Center (NAPC), specialized in the area of applied economic analysis of agricultural policies.

Phase II - “Assistance for Capacity Building through Enhancing Operation of the National Agricultural Policy Center” started on November 1st 2001 and is planned to last for two years. It is centered on developing the capacity of NAPC to perform its technical functions effectively and on a sustainable basis, including the ability to increase awareness on agricultural policy issues, as well as on enlarging the number of cadre from the MAAR and other institutions trained in economic policy analysis. The new phase is organized around the same four components of the first phase, namely: 1) institutional development, 2) policy analysis and advice, 3) training in agricultural economics and policy, and 4) statistical information. However, the new phase counts on the systematic and synergic involvement of NAPC staff in project implementation as a crucial step in developing its capacity.

The project will therefore concentrate its activities on strengthening the institutional capacity of NAPC and enhancing the skills of its staff, while supporting the implementation of its research and training programme.

Opening Ceremony

The Workshop was opened with three statements (full text in Annex 3) delivered by Mr T. Ben Amara, Resident Representative of the United Nations Development Programme (UNDP) in Syria, on behalf of Mr. M. Taher, FAO Representative (who was unable to attend for reasons of force majeure), by H.E. Laura Mirachian, Ambassador of Italy in Syria, and by H.E. Dr. Nouredin Mona, Minister of Agricultural and Agrarian Reform.

The *UNDP Resident Representative* expressed on behalf of the FAO Representative his congratulations for the recent appointment of H.E. Dr. Nouredin Mona as Minister of Agriculture and Agrarian Reform. He referred to the changes occurred in the process of modernization of the Syrian economy, stressing in particular the positive development in the agricultural sector and expressed his auspices for a close collaboration by the UN in general and FAO in particular with the Ministry in support of agricultural development.

He underlined the progress made by the first phase of the FAO project in its various components, including the production of 14 studies covering issues of strategic relevance for Syrian agriculture, three of which would be presented in the Workshop. He further expressed gratitude to the Italian Government for the financial support given to the earlier and current phases of the project. He wished a successful conclusion of the workshop that would involve the expression of viewpoints by various national and international institutions on essential aspects of Syrian agricultural development.

He concluded by thanking H.E. Dr. Nouredin Mona for the support provided to the Workshop and to the project, and by wishing prosperity to Syria under the leadership of H.E Dr. Bashar El Asad.

The *Ambassador of Italy in Syria*, welcomed the participants to the Workshop stressing that it represents a significant step in the cooperation between Syria and Italy through FAO in the field of agriculture. The Ambassador presented her congratulations to H.E. Dr. Nouredin Mona for his new appointment and expressed her wishes for a fruitful continuation of the collaboration between the two countries in the field of agriculture.

The ambassador thanked the FAO Representative, the FAO staff and the personnel of the MAAR for their commitment in ensuring the success of the Project GCP/SYR/006/ITA, which is fully in line with the modernization process undertaken under the leadership of H.E Dr. Bashar El Assad, and expressed her satisfaction with the decision of funding a second phase of this sophisticated and far looking undertaking. This decision implied the allocation of about US\$ 3 million and was based on the trust in the Syrian authorities and in FAO as implementing agency as well as on the satisfaction for results achieved by the first phase of activity.

The Ambassador highlighted the role of this project as part of the support provided by the Italian cooperation to Syrian agriculture, which is a crucial sector for Syrian economic and social development that the Italian government is supporting through a number of programs aiming at promoting the best possible use of the available natural

resources so to support Syria in meeting the challenge of interacting with the rest of the world and the European Union in particular.

She concluded by underlining her satisfaction for participating in the event and wished success for the outcomes of the Workshop as well as for the further results to be achieved in future by the project in the framework of the amicable collaboration between Syria and Italy.

H.E. the Minister of Agriculture and Agrarian Reform welcomed all the participants to the Workshop. He stressed the relevance of the workshop, due to the contribution of national and international consultants, University professors and representatives of the public and private sector. He recalled the attention given to macro and micro policies starting with the Correctionist Movement led by the late President Hafez El Assad and the subsequent diversification approach adopted for the Syrian economy. He underlined the essential role of agriculture in achieving food security objectives and the progress made in agricultural production and yield in connection with the implementation of agricultural policies.

The Minister referred to the economic changes occurring worldwide in terms of liberalization, globalization and economic integration, calling for quick actions especially by developing countries to cope with the changing political and economic environment. In this regard, he referred to the bilateral agreements concluded by the Syrian Arab Republic with Arab countries, the negotiations in view of the Association Agreement with the European Union and the recent application for WTO membership.

Dr. Nouredin Mona stressed the modernization effort being pursued in several sectors of the Syrian economy, with special attention to the agricultural sector through the improvement of the provision of inputs and services and the focus on comparative advantages and natural resource conservation.

He wished success to the Workshop and expressed his hope that the conclusions of the studies presented at the Workshop would help in the decision making process and in the achievement of food security in the country.

Dr. Nouredin Mona thanked the Italian Government and FAO and expressed his desire for the Workshop to contribute to support the economic policies adopted by Syria under the leadership of President Bashar El Asad.

Assistance for Capacity Building through Enhancing the Operation of the National Agricultural Policy Center

The FAO Project, by* *Ciro Fiorillo (FAO)

Mr. *Ciro Fiorillo*, acting Chief Technical Advisor of the Project CGP/SYR/006/ITA, described the results achieved during the first Phase of the project and illustrated objectives and activities for each one of the four components of the recently started second phase.

Concerning the Institutional Development component, Mr. *Fiorillo* indicated that during the first phase the project elaborated two studies containing proposals for

improving the organizational structure of the MAAR, and establishing a specialized institution in applied economic analysis of agricultural policies. He also highlighted that on the basis of the second study the Syrian Authorities have formally established the National Agricultural Policy Center, which has started operations in 2001. In the second phase of activity the project will enhance institutional and managerial capacity of the NAPC by providing equipment and training to the staff, establishing a specialized library, supporting the work of governing bodies and providing technical expertise to assist the formulation, implementation and monitoring of a medium term plan of activity.

With reference to the Policy Analysis and Advice component, the Project has produced a set of 14 policy studies, involving highly qualified technical expertise from many countries in pursuance of three main objectives: increase awareness and deliver advice on agricultural policy issues; provide analytical background for the elaboration of a strategy paper; and provide on-the-job training of national experts. The project has also made available highly qualified international expertise to contribute to elaborating an agricultural development strategy in close collaboration with the MAAR, encompassing a comprehensive vision of agricultural policy making in Syria. In the current phase, the Policy Analysis and Advice component of the Project will be devoted to supporting the NAPC mandate as a research center and policy forum. This will entail assistance in promoting public awareness on policy issues by producing and disseminating publications, supporting the constitution of task forces to conduct policy studies, and establishing the role of NAPC as a forum on agricultural policies by implementing an annual Policy Workshop and bimonthly seminars. The project will also support the NAPC in carrying out policy analysis, and developing investment profiles and pre-feasibility studies on recurrent and occasional basis. These activities are expected to be required as part of NAPC involvement as national counterpart in programs of international cooperation.

With regard to the Training component of the project, an intensive training program structured in three phases was delivered over three years involving 80 trainees. The first two phases consisted of almost 20 basic and specialized courses in economics, agricultural policies and related subjects delivered over two years by national and international trainers. During the third phase, best performing trainees experimented under international supervision in Syria and in Italy how to conduct team research work. In the near future, the project will replicate a similar training program. In addition, the Project will conduct shorter intensive training for a larger audience and specialized training for the technical staff of the NAPC. These will include enrollment of five staff members in overseas Masters Programs, as well as short training courses abroad, on-the-job training, and a diversified program of seminars.

Concerning the Statistical component of the project, Mr. Fiorillo highlighted that, in order to facilitate access to the available statistics for agricultural policy analysis, the project had produced an Electronic Database on CD-ROM including most agricultural statistics and related general statistics. The forthcoming activities under this component will be devoted to enhancing the contents and accessibility of the Database, while enabling NAPC staff to update it on regular basis.

The National Agricultural Policy Center, by Atieh El Hindi, (MAAR)

Mr. Atieh El- Hindi, National Director of the project and Director of NAPC, illustrated the present situation and prospects for development of NAPC.

He referred to the decision adopted by MAAR on December 14th, 2000 and August 9th, 2001, to establish the NAPC, define its objectives and scope and design its future structure. He recalled the support that the project in its first phase had already provided in view of the establishment of NAPC, through institutional capacity building, training, policy studies and the initial development of a data base. He further indicated that the NAPC would be in need of external support in view of the consolidation of its functions and activities.

Mr. El Hindi underlined the close interaction of NAPC institutional development with project activities over the next two years, stressing that the focus of the project in its different component will be on supporting the development and consolidation of the functions and modus operandi of NAPC.

He also highlighted that the project had already recruited an international consultant for preparing, in close consultation with the Director of the Center, a proposal for the work plan of NAPC for next five years. The first two years will be closely integrated with project activities, while the remaining three years are expected to offer the opportunity for consolidating NAPC's functions and operational capacity on a self-sustaining bases, as a center of excellence in providing information, training and analytical support to the agricultural policy making process in the country.

Implications for the Syrian Agricultural Sector of a Possible Co-operation and Trade Agreement with the European Union

by Jose Maria Garcia Alvarez Coque, Polytechnic University of Valencia, Spain

Summary of the presentation

The presentation started by pointing out that the Association Agreement (AA) covers negotiations on reciprocal free trade of manufactures and the extension of mutual concessions for agricultural goods, However, the AA must be seen as a substantive framework for economic reform and its provisions go beyond the establishment of a Free Trade Area (FTA). The agricultural chapter remains an exception of the trade liberalization program, and has been a source of serious debates and delays in negotiations between the EU and Mediterranean Countries (MCs).

Trade relations between Syria and the European Union reveal an asymmetric trade pattern. As far as agricultural products are concerned, Syrian trade experience with the EU is disappointing. Only 15% of Syrian exports to EU against 87% of Syrian imports from the EU are processed products. The net bilateral agricultural trade balance is negative for Syria and has declined over the last years. The net balance for food processed products has fallen from -156 million Euro in 1995-97 to -164 million Euro in 1997-99. Five products only represent 90% of Syrian exports to the EU. Out of them only potatoes show a positive development. Concentration of Syrian exports on raw cotton is marked, and this product accounts for 73% of Syrian agricultural exports to the EU. The export pattern of Syria to the EU is also different

from other Mediterranean Countries (MCs). Mediterranean products (fresh and processed fruit and vegetables, and olive oil) account for only 6.2% of agricultural Syrian exports to the EU, against the 63% observed for the whole group of MCs. Syrian actual exports have adapted to the EU tariff structure and they have tended to concentrate on the “windows” open by EU policies (products with zero tariffs).

The main constraints for a full consideration of the agricultural trade in the AA appear to be of political nature and the present momentum is not the most opportune to expect a full tariff liberalization. Key issues for the Syrian-EU agricultural negotiation are the preferential entry price, the import licensing system, the rules of origin, and the “agricultural component” for agri-food products. The entry price system continues to be the main barrier faced by the Syrian horticultural products.

Farm concerns in the EU are very sensitive about the Euro-Mediterranean FTA. The EU negotiators are also concerned about further requests for concessions by other MCs. On the other hand, Syria has also interests in pursuing trade liberalization with other Arab countries. The EU represents 12.6 % of Syrian agricultural exports against 57.3% represented by the Arab countries. Both regional strategies, the AA with the EU and the Arab FTA are compatible with a trade creating FTA

Under the present co-operation protocol, only 1% of Syrian export value to the EU receives a real preference. Syrian export composition has tended to adapt to the EU tariff structure and does not properly reflect its comparative advantages. Results of the negotiation with the EU will probably lie between two extreme scenarios. If the “traditional flow” approach is taken as a strict reference, the preference margin for Syria would be slightly above 0.5% of Syrian agricultural export value to the EU. However, Syria might wish to improve its participation in the EU markets of some products, such as anise, apple, apricots, green beans, broad beans, dry broad beans, melons, cherries, cucumbers, garlic, grapes, lentils, mushrooms, peaches, pears, pistachios, plums, potatoes, and tomatoes. On the other hand, there are other products with low trade, but a significant surplus situation in Syria. These products are citrus, apples, potatoes and olive oil. Free market access to the EU could help create adequate incentives for the development of such products. Potential gains for Syrian exports from a wider access to the EU market can be significant if quantitative limits are weakened or eliminated. Just by balancing the participation of Syria in total MCs’ exports with the participation of Syria in total EU imports from MCs, the Syrian export value would increase by 52 million Euros, for a group of 7 goods of export interest for Syria (36% of total Syrian agricultural export value to the EU).

In some markets, the MCs enjoy significant shares of extra-EU imports for specific seasons, and this might become the case for Syria too, under the bilateral FTA. However, the constraints to Syrian exports are also supply-related. While farm-gate prices in Syria are below EU levels for a number of fruit and vegetables, high marketing costs still create difficulties for Syrian competitiveness. This involves challenges for Syrian exports that go beyond the traditional trade barriers.

For the potential gains to become a reality, the agricultural FTA should be accompanied by structural reforms, encouraged by the AA. This will involve efficiency gains and could help to enhance European Foreign Direct investment. With an adequate transition period (10-12 years), the Syrian manufacturing sector could soften the adjustment costs. Once the AA enters in force, the tariff liberalization can be scheduled with a varied rate of abolishment, according to the sensitivity of the products. The ongoing reform process should continue in order to overcome the

“bottlenecks” in the economy and to adjust the role of the public sector. However, long transition does not mean to slow down the path of policy reforms. A reform of trade practices, in line with the WTO rules, would introduce transparency as well as facilitate trade negotiations with other Arab countries and with the EU. A reform of policy instruments, leading to a full tariffication of border measures seems relevant here, and tariff reductions would come as a second priority. Price comparisons between the EU and Syria for some products of import interest for Syria (wheat, barley and sugar) suggest that the opening of Syrian agricultural markets should be gradual, through the progressive opening of TRQs. The opening of the agricultural import markets should be accompanied by a number of actions addressed to bring more flexibility to the domestic pricing system.

FDI will benefit from the current process of reforms, in relation to the banking system, the currency regulations, the movement of capitals and the administrative procedures for foreign commercial transactions. More explicit co-operation programs can be considered, under the MEDA framework, as an important tool for development assistance. The implementation of the MEDA projects should be accelerated with proper attention to agricultural and environmental concerns (environment and water resources could limit expansion of export crops if adequate measures are not taken to rationalise intensive production). The agricultural chapter in MEDA should be strengthened in co-ordination with the Institutional and Sector Modernisation Facility (ISMF). One option would be the co-ordination between ISMF and a technical unit of support to international negotiations that could be created at the NAPC, with the support of MEDA funds. International networking can be useful approach to enhance possible interactions among economic actors. As an example, the participation through the National Agricultural Policy Centre (NAPC) in international projects on policy monitoring of agricultural negotiations could be supported.

Although Syria will not probably obtain full tariff liberalisation for all exports to EU markets, it seems feasible for Syria to obtain TRQs that depart, to a certain extent, from traditional flows. Accordingly, Syria could ask for an early implementation of substantial parts of the agricultural chapter of the AA, before the end of the ratification process, with the commitment of a review of the agricultural trade chapter five years after the AA is signed. This is consistent with the consideration of the AA as a dynamic process where concessions are not static and can be periodically reviewed.

Implementing most of these recommendations will require appropriate technical assistance. This will look at the trade policy reforms, the permanent outlook of international negotiations, the EU policies, the improvement in foreign marketing, and the adoption of sustainable methods of production. In such effort, the NAPC can be a useful tool for policy analysis and formulation of practical recommendation based on firm foundations.

Summary of the debate

The discussion made it evident that the idea of an AA has still to be assimilated and that a number of questions on its possible impact on Syrian agriculture remain open. Most of the questions reflected fears that EU import barriers could restrict benefits for Syria from the Free Trade Area, even by taking unilateral actions. Thus, some questions were related to the unfair treatment of the EU Common Agricultural Policy

(CAP) on Syrian exports (in relation to that granted to other Mediterranean countries). Another question expressed the concern about how diverging interests between Northern and Southern EU Member States could further block the EU preferences to Syrian exports. Questions were made also on specific products, which are not the most common of Mediterranean agricultural systems, but could be of interest for any export strategy, such as organic farming, or intensive livestock and egg production. The consultant's reaction to this group of questions was along the following lines. First, the CAP is moving towards a reform that will eventually set rural development on a higher profile, compared to market support policies. This change, still slow, could contribute to overcome not only the conflict of interests among EU Member States, but also between the EU and Mediterranean countries. Secondly, there is a problem of co-ordinating Mediterranean countries interests in order not to erode their preferences among each other. Third, the tariff barriers are not the only constraint on Syrian exports and, therefore, the removal of such barriers does not avoid the influence of technical barriers, such as quality and environmental standards imposed by the big distribution. Fourth, the AA will open new possibilities for agricultural diversification. This has also to do with intensive livestock, although the consultant underlined the importance of low costs for raw materials (feed). There is also a potential for organic farming in Syria, although the EU market for organic products is still small, but growing fast. Here the consultant expressed that it is for the interest for Syria to join international certifications for quality, and referred to some examples in Europe.

The discussion also raised domestic concerns about the impact of the Association on strategic crops, which might suffer from strong competition from EU products. The consultant was in favour of a relatively long (10-12 years) schedule to facilitate the adaptation of Syrian products. Tariff-rate quota could be used to make transition easier. Another question raised was on Genetically Modified Organisms (GMOs) and their impact on Syrian agriculture. The consultant expressed the idea that biotechnology has advantages and it would not be wise to skip technological change. That doesn't prevent governments to take actions to minimise the potential risks of GMOs on environment and health (although evidence is not conclusive). The EU follows strict procedures of approval for new GMOs. Labelling remains a controversial issue, because it can be considered as a technical barrier that increases the costs of the firms. Social concerns should induce governments to assist small farmers to take the maximum possible advantage of all the available techniques, not only GMOs, and to take autonomous decisions, less dependant on big companies' strategies.

Another question dealt with the political ability of the EU and Mediterranean countries to have their own economic and trade policies, with respect to other powers, such as USA. The consultant expressed his confidence that the whole Mediterranean region and the EU will be stronger through economic co-operation. He referred to the implementation of a new currency for 300 million Europeans. He also considered the WTO not as a tool for imposition by the trading powers, but also as a framework where developing countries could defend their own interest.

A written question, received after the Workshop, concerned the issue of privatisation. The Consultant argues that there is leeway for Syria to decide specific reforms and their timetable. Privatisation could have advantages in the sense of increasing efficiency of Syrian processing industry. However, experience of other countries

show that there are many ways of undertaking privatisation, and improvisation would not be wise.

The following recommendations, additional to those included in the policy study, resulted from the discussion:

1. There is still a lack of understanding by the public about the “rules of the game” involved in the AA, which underlines the need for explaining its meaning and implications to the public.
2. The co-operation dimension of the AA should also be underlined by facilitating interchanges between public and private actors from the EU and Syria (experiences like the Syrian European Business Centre point to the same direction).
3. According to the consultant’s vision, “the work begins” only after the conclusion of the AA. The transition has to be prepared and the Syrian society should assimilate the commitments for economic reforms.
4. The Consultant highlighted the need to establish, within the NAPC, a technical unit for monitoring international trade negotiations.
5. The NAPC might undertake a project for modeling quantitative impacts of the trade liberalization on Syrian agriculture.
6. As the negotiation for the AA is gaining momentum, Syria should not underestimate the fact that other Mediterranean countries, such as Algeria and Lebanon, have already finalized their negotiations. Time starts to be pressing. Efforts to obtain a practical result of the negotiation should strengthen during the first months of 2002.

The Utilization of Water Resources for Agriculture: Analysis of the Current Regime and Policy

by *Consuelo Varela Ortega, Polytechnic University of Madrid, Spain*¹

Summary of the presentation

The presentation was organized in three major parts. The first part addressed the main problems encountered in Syria in relation to water resources management and to the adoption of modern irrigation techniques. The second part covered (1) the results of the macro analysis carried out at national and regional levels based on the simulations of different water policies scenarios, and (2) the results of the micro analysis performed at farm level based on the simulations of the adoption of modern irrigation techniques on different types of farm models and their effect on the economic results of the farm and the productivity of water. The third part presented the recommendations drawn from the study.

Part I-The main problems of water resources management in Syria

From the 18,5 million ha of total lands of the Syrian Arab Republic, cultivated land extends over an area of 5,484,000 ha of which 1,213,000 is irrigated land (22%),

¹ The study presented by Ms. Valera Ortega had been prepared jointly with Mr. J.A. Sagardoy.

3655000 ha is rain-fed land (67%) and 616,000 ha is fallow land (11%) (1998 data). Irrigated agriculture has increased steadily in Syria over the last decades, almost doubling since 1985. This mounting pace has been meant to comply with the nation's food security policy objectives and thus to satisfy the food production needs of an increasing population

Water resources balance. The water resources of Syria are very limited compared to the needs of the country and estimations show that available resources amount to 14,589 million m³/year as total uses reach 19,162 million m³/year. In consequence, the water balance for Syria is negative with a deficit of 3,104 million m³/year varying distinctively across basins. In fact, the balance per basin shows that only three basins, namely Euphrates, Coastal and Al Badia have a positive balance. The remaining have considerable negative balances: Barada and Awag (-311), Yarmouk (-206) and very critical Orontes (-856) and Al Khabour (-3151). The magnitude of the deficit of the Al Khabour indicates that it will be difficult to correct it without special and severe measures. In this context, as water development policies will have distinct effects on the different basins, several scenarios have been simulated in this study to assess their effects at country level and at basins' level.

Adoption of modern irrigation technologies. Considering the severe water scarcity in Syria, the adoption of modern irrigation techniques is crucial for the country's development of irrigated agriculture. In fact, the related authorities are actively encouraging irrigation modernization policies. Available average water use in irrigation is 12,434 m³/ha and the adoption of modern technologies should reduce it to 8,000 m³/ha. The rate of adoption of modern irrigation techniques from 1999 to 2000 was 37,686 ha and for the period 1998-1999 was 19,641 ha. Although these rates are quite satisfactory and show a positive growing trend, they are below planned rates (300,000 ha a year, that will cover the total 1,200,000 ha of irrigated lands)

Current policies and action plans: adoption of modern irrigation techniques. With the objective of reducing water use as stated above, the Government of Syria has decided that all irrigated areas will be equipped with modern irrigation techniques in 4 years. This means that 1,149,349 ha will have to be modernized at a rate of adoption of 287,337 ha/year. Alongside, as a way to control water use, the GOS has decided to promote the installation of measuring devices in all existing wells and is requiring that all wells must be licensed by 1 July 2001. The Agricultural Co-operative Bank will provide loans to the farmers to purchase modern irrigation equipment

Current policies and action plans: expansion of irrigated areas. The development of new irrigation in the public sector has been important increasing from 219,273 ha in 1993 ha to 396,518 in 2000 at a rate of roughly 25,000 ha/year. Projected expansion of irrigation is 27,800 ha/yr to total 400,000 ha in 15 years. Most of the new systems are of line canals from the headwork to the farm gate. Unfortunately, the use of pressurized networks is still rather limited.

Part 2-Results of the Analysis carried out in the study

The analysis in the study includes two major parts at different levels of aggregation. One consists in the analysis of the irrigation water sector in Syria at national aggregated level and at regional basin's level. The other part is a disaggregated farm level analysis. In both cases, simulations of different scenarios have been carried out to permit short and long-term assessments of different policy alternatives for conserving water resources in Syria. The complete set of simulations compile a

dynamic macro and micro database that can be further utilized for training purposes where alternative water policy scenarios and farm models can be developed.

Macro Analysis: National and basin's level. Different scenarios have been defined to evaluate the effects of several policy alternatives on the short, medium and long-term availability of water resources in Syria. The analysis at basin's level was performed to permit to assess the diverse impacts that those policies may produce on critical high-water-deficit basins with respect to water-surplus basins. This distinction is crucial for water policy analysis and policy recommendations.

Scenario 1: Present policy: Combination of irrigation modernization (4 years) and irrigation expansion (15 years). This scenario represents the official government policy consisting in the modernization of the irrigation techniques and the development of an area compatible with the requirements created by the increasing population. The area to be modernized is 319,017 ha/year (for a period of 4 years) and those to be developed are 27,800 ha/year (15 years). The evolution of the deficit for the whole country evidences that this policy will not be sustainable. During the four initial years, a large reduction of the deficit is achieved but from the 5th year onwards the deficit starts to increase due to the development of the new areas. The Al Khabour basin recovers first but declines later on to values close to the initial ones. This is an indication that in such a basin the development of new irrigation should not be promoted. A similar conclusion applies to the Orontes basin.

Scenario 2: Modernization policy: Modernization of existing irrigation schemes with no expansion of irrigation. This scenario permits to visualize the effect of a gradual modernization policy whereby the whole irrigated area (1,149,349 ha) will be modernized over a period of 15 years at the rate of 80,000 ha per year approximately. This scenario permits to reach a positive balance by the 12th year and by the year 15 the balance reaches a positive value of 857 Mm³. Unfortunately this scenario will not permit to cover the needs of the growing population and some commodities will have to be imported. The reduction of the deficit in the critical basins (Al Khabour and Orontes) are close to 40% of the initial values, but also indicates that even if all the area is modernized these basins will continue to have an important deficit. Therefore, stronger measures will be required to achieve a positive balance in these critical basins

Scenario 3. Long-term combined policy: Combination of irrigation modernization and irrigation expansion (15 years both processes). This scenario assumes that modernization will be undertaken over the whole irrigated area but at the rate of 80,000 ha/year. Expansion of irrigated area will take place at the same rate as in Scenario 1, while modernization will be undertaken at a pace, which is more in line with other international experiences. This permits the reduction of the deficit, but after year 15 the trend will reverse as all the existing irrigated area will have been modernized and only new areas will be added. The critical Al Khabour basin follows a similar pattern until year 11 where all the area to be modernized is covered and from that year on only new area is added producing a reversal of the trend.

Scenario 4. Differentiated policy: Modernization in critical basins and limited irrigation expansion in selected basins. This scenario simulates different irrigation policies for the most critical basins. For the critical Al Khabour and Orontes basins, it is assumed that all the irrigated area will be modernized in 5 years and no new

irrigation will be developed. For the remaining basins the existing area will be modernized along a period of 15 years. New irrigation areas will be developed only in the Euphrates and Coastal basins totaling 165,000 ha in a period of 15 years which represents approximately one third of the present Government plans (400,000 ha). The effect of this hypothesis is quite positive as it will permit to reduce the national deficit. This again shows that even if the modernization of the whole irrigated area is carried out in a short period the basin remains with a high negative balance

Micro Analysis: Farm level. The combination of farm types, water sources and irrigation techniques has resulted in 23 farm models which have permitted to compare the effects of the adoption of modern technologies for irrigation. A farm typology was defined to represent the irrigation agriculture in Syria. It consists on three representative farms according to size, location and crop distribution. A large extensive farm of 14ha (wheat and cotton), a medium size semi-intensive farm of 5 ha (wheat, cotton, sugar beet and potato) and a small intensive farm of 1,5 ha (potato, tomato and oranges), which together represent 77 % of all irrigated holdings and 64% of the irrigated surface. Water sources in the different types of farms include surface water from rivers and underground water from wells of 200 m, 100 m and 50m depth. A field survey was conducted which permitted to determine the technical parameters and irrigation costs in the farm models. Irrigation techniques include traditional gravity irrigation and modern sprinkler and drip irrigation.

Comparative effects by farm type. The effects of the adoption of modern irrigation on farm profit can be substantially different in the large, medium and small farms evidencing that structural parameters and cropping patterns are determinant and hence regional characteristics. The results on financial returns of water show that for all farm types, the adoption of modern irrigation techniques increases substantially. However, differences between these two techniques are evidenced, and in the case of sprinklers increases range from 55 to 125% and in the case of drip irrigation these figures double ranging from 116 to 218%. Across all farm types, the kind of water source (surface or underground water) determines also the profitability of adopting modern irrigation methods. Larger increases in farm profits result when water is extracted from wells as volumetric water costs are substantially reduced.

Adoption of modern irrigation techniques in the large farm. In the large farm irrigated by river water, farm profits increase moderately when modern irrigation techniques are adopted. From a net margin per ha of 18,683 Sp/ha in surface irrigation to 23,395 SP/ha in the case of sprinkler irrigation and 22,387 SP/ha in drip irrigation. These results show that in this type of extensive farm, sprinkler irrigation is more suitable than drip irrigation although sprinklers cannot be used along the whole growth period of cotton.

Adoption of modern irrigation in the medium size farm. Medium size semi-intensive farms irrigated by river water increase farm profits by 33% when sprinkler irrigation is adopted and by 36% when drip irrigation is adopted. These results evidence that this modern technology is more suited for a more intensive cropping pattern (that includes potato). The advantages of drip irrigation are reinforced as volumetric water savings are greater in this type of technology.

Adoption of modern irrigation in the small farm. In the case of the small intensive farm, that grows mainly fruits and vegetables, the comparative efficiency of adopting drip irrigation is further evidenced both for surface river water and for underground water. For surface water, farm profits increase by 38% if sprinkler irrigation is

adopted and 67% if drip irrigation is selected. If irrigation water is extracted from shallow 50 m wells, farm profits increase by a double amount, 67% in the case of sprinkler irrigation and 111 % in drip irrigation

Part 3-Recommendations

1. A differentiated water basin policy would offer the best opportunity to reduce the imbalances among basins. Such policy should consist of an intensive plan of modernization (8 years) in the most critical basins with a lower rate of implementation in those basins where the deficit is smaller (15 years)
2. In those basins where the water balance is positive, the development of new irrigation can be restricted to the existing resources (11,000-13,000 ha/year)
3. The implementation of the above recommendation in the Al Khabour and Orontes basins will not be sufficient to re-establish a positive balance in the time span considered and additional measures will be required.
4. Establish the maximum amount of water that can be utilized per ha and its equivalence in area planted for each crop under each technology. This is referred to as: Water/crop quota system. This is the best alternative in the absence of water measuring devices. (i) This will permit the farmers to chose their cropping pattern within an established quota of water and have it approved by the government authorities.(ii) To avoid distortion of the national objectives of the strategic crops' production, the government can establish support prices for strategic crops to achieve those objectives. (iii) This system should be implemented gradually over a 5 years period and complemented by other measures.
5. Partial subsidy of the investment cost in irrigation technologies is recommended in the critical basins (Al Khabour and Orontes).
6. Sprinkler irrigation is suitable for wheat but not adequate for all phases of crop development of cotton. The inverse applies for drip irrigation. The water/crop quota system will permit to overcome this serious technical limitation by allowing the farmers to specialize in specific crops or cropping patterns
7. Monitoring and control of the adoption of modern irrigation techniques should be implemented. Statistical information at farm level should be developed as modern irrigation has different financial effects across farm types.
8. Adoption of pressurized modern irrigation techniques will be limited to canals operating on continuous flow. Precision land leveling should be adopted in the remaining areas.
9. The implementation of irrigation modernization should be accompanied by an intensive training program addressed to farmers, extension agents and professionals
10. It would be advisable to establish Water Users Associations (WUAs) for underground water by grouping wells located in the vicinity to discuss the implementation of the measures mentioned before.

Summary of the debate

A number of comments and observation on the presentation focused mainly on agronomic and environmental issues only indirectly related to the analysis of water management policies, while others concerned with the provision of drinking water in urban areas, which was beyond the scope of the study. Examples of the technical issues raised are the possibility to increase maize production, the substitution of cotton crops, the development of fodder crops for animal production, the impacts of irrigation on soil salinization, the use of fertirrigation and the spreading of fungus infections in heavily irrigated areas.

The discussion clarified that the greater increase in farm profits shown in the more intensive small farms, considered on statistical representation, is not due to low production costs for labor in those farms, but due to cultivation of More profitable crops, accounting for higher returns. This implies lower costs of the investments in new irrigation equipments, which, together with yield increase and reduced water use allowed by the modern irrigation techniques, results in higher profits.

The fact that the study did not consider the production of feed crops was motivated by the evidence that, according to the official data on crop distribution in the different Governorates, feed crops were not found to be representative of the irrigated agriculture in any of the areas.

The discussion also clarified an apparent contradiction between two recommendations related to the establishment of WUAs. One recommendation refers to surface waters in the publicly developed irrigation systems, where WUAs were not found to be crucial, the other relates to underground waters and to the necessity of establishing WUAs for coordinating the use of common waters in nearby wells.

Agricultural Development Strategy for Syria

by Alexander Sarris, University of Athens, Greece

Summary of the presentation

The consultant started his presentation by stating what he considered the major issues currently faced by the Syrian government in agriculture: while it was recognized, in light of developments registered over the last ten years, that past agricultural policies and strategies had reached their limit and needed major reform, there had not been any suggestions for major reforms and there was understandable hesitation to abandon the system of annual production planning, which had been the core of agricultural policy in the last thirty years, and to adopt other policies that were of uncertain outcome.

The presentation proceeded with an analysis of the current structure and performance of Syrian agriculture. Concerning the overall economy and agriculture, it was pointed out that according to calculations based on official statistics there had been a continuous decline in per capita real consumption expenditure in Syria during the past decade, despite increases in per capita GDP, and increases in per capita agricultural GDP.

Concerning structure of agriculture, it was pointed out that over time there had been a continuous subdivision of farms and a growing number of holders that had non-agriculture as their major economic activity. This was due to both inheritance laws and custom, as well as inability of land holders to sell land because of restrictions on land sales placed by the land reform laws. As far as state land was concerned, both original state land, as well as that acquired through the land reform, it was pointed out that less than one third had been distributed to farmers, and another third was rented out to farmers. On this type of productive land there were several restrictions on both production as well as prohibitions of sale even after the recipients had paid off the cost of the land. This created significant distortions in the land market, and rendered to the government large control over production, as it controlled more than one third of cultivable land.

It was pointed out that the existing census data suggested that the technology used in farms, as expressed by capital labor ratios utilized, were different in different farm sizes, with larger farms being more capital intensive. This suggested that the relative prices of capital and labor faced by different farm sizes were different, leading to imperfections, especially in the capital market.

On agricultural performance, it was pointed out that while aggregate production of most agricultural products had grown at reasonable rates, on a per capita basis production had not grown for most products. It was also pointed out that while yields of most crop products had grown at reasonably fast rates over the last ten years, there had been considerable annual yield variations even for irrigated crops. This suggests that while inputs are provided to farmers on the basis of production crop licenses, in reality farmers tend to reallocate inputs towards the products they regard as most profitable, and this cannot be controlled. Finally, it was pointed out that the data suggested that per capita available quantities for consumption of the major agricultural products had been declining over the last ten years, something that occurred despite the government policy of food self sufficiency and food security.

The presentation went on to discuss the degree of market support, namely the net effect of all policies affecting trade and prices, provided to Syrian agriculture. It was pointed out that depending on the exchange rate utilised, the computations suggested different patterns of support. At the official exchange rates, agriculture had been subsidized all throughout the 1990s at a roughly constant rate of 30% of the value of gross agricultural output (GAO). When the trade-weighted exchange rate was used, the support to agriculture has declined over the past ten years from 30 to about 7% currently. When, finally, the neighboring country exchange rate is used, agriculture appears to have been heavily taxed in the early 1990's at rates that reached as high as 25%. Over time this taxation had been continuously reduced, and turned into net subsidisation in the late 1990's, to a rate that reached 7% in 1999. This very different pattern of support highlighted the significant importance of the exchange rate for Syrian agriculture.

The presentation then explored the distributional implications of current support policies, pointing out that the current system of planning and support tended to favor much more the larger farmers. This is because the bulk of support is offered to products like wheat and cotton. This is evidenced both in terms of the overall expenditures for support, which are largest for these products, the large amounts of irrigated land utilised for wheat and cotton, and the amounts of lending provided for wheat and cotton. It was also pointed out, that survey results revealed that larger

farmers sell the majority of wheat and cotton to the government, and hence they are the biggest beneficiaries of the support policies, while the smaller farmers of these products tend to cultivate largely for home consumption. Smaller farmers also tended to be producer non-supported products like fruits and vegetables.

In light of the above observations and analysis, the strategy proposed should rely on the following vision:

Agricultural development in Syria should aim at an agricultural sector that is efficient and productive as well as sustainable in its use of resources, competitive in terms of external orientation, and providing adequate incomes to a large number of holders with equitable distribution of incomes and benefits.

The vision outlined could be achieved by policies that aim at the following objectives, many of which were already espoused by the government:

- Promote self-reliance for the agricultural sector and the economy via greater reliance on comparative advantage;
- Utilise fully and improve productivity of natural agricultural resources, especially those of land and water;
- Increase labour productivity in agriculture;
- Achieve equitable levels of income distribution, satisfactory targets of poverty alleviation in rural areas, and contain rural-urban migration;
- Secure adequate levels of employment to the rural labour force;
- Secure adequate food consumption of low income urban and rural populations;
- Provide adequate supply of raw materials at reasonable prices to domestic processing plants;
- Increase the value of agricultural exports;
- Promote private investments as a major instrument for achieving economic development;
- Develop and expand economic relations with foreign countries, with a view to promoting exports, acquiring new technologies, and becoming a regular member of international organisations, such as the WTO;
- Achieve better utilisation of water resources for irrigation and other uses; and
- Maintain environmental balance;

On the basis of the above vision and objectives, the presentation outlined the basic principles of the proposed strategy. These were the following.

1. Agricultural development in Syria should be based on intensification of current production structures and methods, along lines of comparative advantage, coupled with more efficient, conservation minded, and labour intensive production methods.
2. Any planning of production or resource use should be based on providing to farmers appropriate incentives, and not through coercive mechanisms.
3. The orientation of agricultural and food production should be organised within a context of an open and export oriented agricultural sector.
4. Agricultural development should be seen as part of an overall rural development, and labour employment strategy.
5. The organisation of production, marketing and processing of agricultural products should allow in the short and medium term, both private as well as

public agents to participate in a non-discriminatory way in all aspects of the agrofood chain.

6. The role of the public sector should be gradually redefined to include correction of market failures, regulation (not control) of markets, and redistribution.
7. The process of adaptation and transition to a more market oriented but regulated agricultural sector should proceed at a fast pace.

The presentation went on to suggest policies to implement the proposed strategy. The major policy proposed concerned a new system of production planning and water use. The basic idea is to transform the current system, based on a system of licenses to produce, to a system based on licenses to sell for the main strategic products. The proposed system involves guaranteed prices for a maximum amount of production, tradable licenses to sell, allocation of the licenses on the basis of water and other environmental constraints. The proposed system was described and its advantages compared to the current system were pointed out as follows:

1. The government could plan the maximum amount of money needed for total support.
2. The government, by planning the maximum amount of the strategic products that could be supported, would guarantee that production would indeed take place.
3. Production of the supported products would take place at the lowest possible cost.
4. The proposed system would ensure that there would be enough production to supply the raw material needs of the domestic processing plants.
5. The allocation of the licenses to individual producers could be utilised to achieve income transfer objectives.
6. The incentives would be to increase yields on both rainfed and irrigated areas, so as to achieve the desired quantities with minimum area use. This would tend to increase land productivity.
7. The proposed system would maintain a large part of the current administrative planning structure of the MAAR and would avoid costly bureaucratic reorganisation.
8. The proposed system would allow the farmers freedom as to what to produce.
9. Total water use could stay within ranges that do not produce unsustainable draws of water from the water basins. In other words the license to sell would play the role of a license for water use.
10. The proposed system could easily be gradually adapted to a market based system, whenever the government decides that the agricultural sector and the economy is ripe for such a policy change.

The adaptation of the current system to the proposed one was discussed, and it was pointed out that the proposed system could easily be adapted from the current system.

The presentation went on to suggest additional policies to supplement the basic policy proposal. Such recommendations included, among others, per-hectare water charges, transforming the support of non-strategic crops to tariffs, developing credit unions and

microfinance groups, distributing to farmers the state land that is currently rented, and abolishing the restrictions on land sales of state land distributed and fully paid for by the recipient.

Summary of the debate

The debate was opened by an intervention stressing that the volume of Syrian national livestock production was not sufficient to cover the local demand, so reduction of the number of wells and lifting of feed subsidy, as proposed by the consultant, would result in decreased herds and, consequently, reduced per-capita consumption of livestock products. The same intervention also questioned the consultant critics of the self-sufficiency policy, stressing that it can be considered irrational only under international market fully respecting free trade conditions. The consultant concurred with the first observation which was correct in term of impact on production, while the suggested impact on consumption could only be observed in a closed economy. On the second observation, the consultant further stressed that food self-sufficiency for a country can be justified only under conditions of significant and credible probability of a total inability to import, when needed, vital products that can threaten the food consumption of the population. Such inability to import can occur, for instance, if there is an embargo on imports imposed by other countries, due to some kind of international dispute. However, past experience suggests, that even in cases where the embargoed supplies were a large portion of world trade (e.g., the US embargo on wheat imports by Russia under president Reagan), the embargo was not effective in reducing imports, as it is quite easy to import cereals in a world market characterized by a large number of suppliers. Given that Syria is becoming increasingly integrated in the world economy and international trade, the probability of the situation of inability to import cereals is very small. Hence, a policy of food self-sufficiency seems not justified.

Various interventions stressed that the proposed strategy does not pay adequate attention to the livestock sub sector. One intervention underlined that the sector is already penalized, for examples in terms of access to credit, despite the fact that it accounts for about 30% of the agricultural production and 10% of the total economy, providing a meaningful contribution to the trade balance and a special contribution to rural household consumption. Another intervention criticized in particular the fact that the study did not address livestock production of the small intensive farms. The consultant, while fully acknowledging the importance of livestock production for Syrian agricultural development, noted that the specific sub-sector issues had already been explored in a separate study conducted under the Project and used as background for the strategy. He also stressed that a study on the agricultural development strategy should focus on the whole agricultural sector and its interrelations with other sectors of the economy, in order to overcome the serious bottlenecks generated by a policy approach focusing rather independently on individual sub-sectors. Within the strategy study, the livestock sub-sector is addressed only indirectly and the main recommendation, as for other sectors, is that policy should move in the direction of intensification rather than extensification, and, as for all non-strategic products, policy interventions should be simplified and implemented through tariffs, abolishing other measures aimed at price control or support.

Commenting on an intervention referring to the data on labour and capital labour ratio used in the study, the consultant noted that the data utilized for the estimates of capital

labour ratios, obtained from agricultural census of 1994, were clearly insufficient to obtain a detailed picture. This would require information from a detailed national household survey. Conducting such a survey is a strong recommendation made by the study.

One intervention stated that to demonstrate the growth of the agricultural sector the use of dependency ratios is needed, as it reflects the burden incurred on the farmers to produce sufficient food for the household and for others. The consultant noted that the dependency ratio is not needed to assess the ability of the farmer to feed his family. Indeed, to feed his family a farmer needs to generate enough income, whether from agriculture or non-agriculture, and does not have to produce all of what the family consumes from his own farm.

On the issue of land fragmentation and its relationship with the inheritance system, raised in many interventions, the consultant highlighted that land fragmentation is the result of two processes working in opposite directions. On the one hand, inheritance laws and customs tend to subdivide farms. On the other, there are tendencies to consolidate farms to produce exploiting economies of scale. Experience in other countries, similar to Syria in terms of climate and farm structure, suggest that consolidation is not a strong tendency, with land fragmentation being the stronger tendency. The laws that restrict land sales aim at restricting land consolidation and distress sales. However, from a social perspective it seems appropriate to let the farmer himself decide on what is best to do with his own land. If the farmer desires to sell, in order to invest in another activity, it means that this is the best option for him and the economy, and there is no reason for the government to prevent him from doing so. This is the reason behind the suggestion for changing the laws that restrict land sales. More specific issues and detailed interventions are best left to detailed analysis of land laws and tenure systems, which was the focus of one of the studies conducted under the Project and used as background for the elaborated strategy.

Answering a question on farmers' cooperatives and their role in improving marketing in qualitative and quantitative terms, the consultant highlighted that co-operatives have a crucial role to play in marketing of agricultural products, as well as in credit. As demonstrated by the experience of many countries, cooperatives can effectively carry out activities such as storage, grading and sorting, input procurement and distribution. However, in order to perform such roles, cooperatives should be controlled by and accountable to their members and not to the government. In this direction, it is suggested to change the structure of cooperatives to make them more accountable to their members.

Various interventions noted that the comprehensive coverage of the proposed strategy, encompassing many different issues, required a more in depth discussion to assess the implications of these proposals. It was suggested by the audience to organize follow up sessions. In this regard, the consultant stressed that the very objective of the entire work was not to provide the Syrian Government with closed options on possible courses of action, but rather to present analyses and ideas that could support Government's efforts to improve the strategy of development and the policies implemented. In this context, extensive discussion of any new idea involving possible policy action is required and desirable both within the Ministry of Agriculture and among all other parties involved in Syrian agricultural policy decision making.

Annex 1 – Programme of the Workshop

- 9:00 **Opening ceremony**
H. E. The Representative of FAO in Syria
H.E. The Ambassador of Italy in Syria
H.E. The Minister of Agriculture and Agrarian Reform
- 9:30 **Coffee Break**
- 10:00 **Assistance in Institutional Strengthening and Agricultural Policy**
The FAO Project
Ciro Fiorillo, FAO
The National Agricultural Policy Center
Atieh El Hindi, Director NAPC, MAAR
- 10:30 **Implications for the Syrian Agricultural Sector of a Possible Co-operation and Trade Agreement with the European Union**
José-Maria Garcia-Alvarez-Coque. Polytechnic University of Valencia (UPV)
- 11:00 **Discussion**
- 11:45 **The Utilisation of Water Resources for Agriculture: Analysis of the Current Regime and Policy**
Prof. Consuelo Varela-Ortega, Polytechnic University of Madrid
- 12:15 **Discussion**
- 13:00 **Coffee Break**
- 13:30 **Agricultural Development Strategy for Syria**
Alexander Sarris, University of Athens
- 14:15 **Discussion**
- 13:00 **Conclusion**

Annex 2 List of Participants

Arab Center for the Studies of Arid and Dry Land (ACSAD)

Arsalan, Owaidees, Soil Physics Consultant, Land Studied Department
El Shawa, Farouk, Irrigation & Drainage Consultant, Land Studies Department
Rasoul Agha , Wathek, Head, Geophysics Section, Water Studies Department
Saker, Ibrahim, Economist, Camels Research and Development Network
Wardeh, Mohammed Fadel, Director, Livestock Studies Department

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Al Alou, Mohammed, Deputy President
Salloum, Najdat, Director

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Agricultural Engineers' Syndicate

Yaghmour, Haidar, Chief Officer

Al Baa'th Daily

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Khayat, Michael, Journalist
Shibli, Mahmoud, Journalist

Al Thawra Daily

Maa'louf, Fawzi, Journalist

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Abdul Nour, Ayman, consultant

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Fadel, Esa'f, General director of the Regional Office

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El Fattal, Yaser, Agricultural Statistics Department

Chamber of Commerce

El Halabi, Mahmoud Said, Advisor
Shallah, Rateb, President

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Hostone, Rashel, Trade Commission

Embassy of Italy

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Embassy of Jordan

Al Nusour, Zuheir, Second Secretary

Embassy of Spain

Casho Quesade, Manuel, Ambassador
Gil-Casares, Inigo, Economic & Commercial Counselor

Food and Agriculture Organization of the United Nations (FAO)

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Viciani, Franco, Resource Person
Zahoueh, Salim, National Professional Officer, FAO Representation
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FAO/Italy Cooperative Programme

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General Establishment for Feed

El Dihneh, Foad, Finance Section
Kara Jouli, Mohammed, Director General

General Establishment for Poultry

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El Ghadban, Ali, Section Head, Production Department
El Shihabi, Yousef, Director, Planning & Statistics Department
Zaher, Abdul Naser, Director, Administration & Finance Department

General Laborers Federation

Habbab, Ahmed, Chief, Vocational Union
Shaban, Shaban, Chief, Agricultural Development Syndicate

General Peasant Federation

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Salameh, Ibrahim, Director, Planning & Statistics Office

Ministry of Agriculture and Agrarian Reform

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 Khair, Mohammed Ayman, Agricultural Affairs Department
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Ismail, Yousef, Export Committee

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Arafah, Sawsan, Water Resources Department
Darwish, Akram, Director, Natural Resource Department
Nouh, Afra', Lands Department

Ministry of Higher Education

El Aidi, Omar, General director of Al Asad Library
El Rez, Omar, Management Affairs Department

Ministry of Industry

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Hadid, Barakat, Deputy Minister
Martini, Mohammed Radwan, Minister of Irrigation
Mirza, Adnan, Deputy Minister

Nama' Company

Ghandour, Saad, Deputy Director of Management Board

People's Asseblly

El Shalet, Omar, Member of Parliament
Hasan, Bahaeddin, Member of Parliament

Syrian Agency for News (SANA)

Hasan, Ibrahim, Journalist

State Planning Commission

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Ismail, Tawfik, Chief Officer
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Syrian Establishment for Agricultural Production Development

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United Nations Development Programme (UNDP)

Ben Amara, Tawfik, Resident Representative

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Benzine, Mustafa, Resident Representative

United Nations High Commission for Refugees (UNHCR)
Jasmin, Adel, Resident Representative, a.i.

University of Aleppo, Faculty of Agriculture
El Seddik, Abdullah, Lands Section Director
Ghadri, Ghassan, Prof. Faculty of Agriculture
Ka'heh, Nawal, Teacher
Rahmeh, Adeeb, Dean, Faculty of Agriculture

University of Al Baa'th (Homs), Faculty of Agriculture
Nicola, Michael Zaki, Professor

University of Damascus, Faculty of Agriculture
Abdul Aziz, Ali, Professor
Abu El Khair, Saleh, Professor
Aziz, Rama, Agricultural Engineer
Dmairieh, Ahmed, Charge d'affaires
El Ashram, Mahmoud, Professor
Al Azmeh, Fawaz, Secretary of Scientific Affaires, Faculty of Agriculture
El Gonaid, Hosain, Faculty of Agriculture
El Homsy, Ayham, Associate Professor
El Mahamid, Waheed, Professor
El Summak, Mahmoud, Head of Agricultural Economic Section
Gamal, Majd, Associate Professor
Gnad, Ehab, Associate Professor
Haddad, Suheil, Associate Professor
Mekdad, Abdul Karim, Professor
Nammour, Dummar, Professor
Salhab, Suleiman, Dean
Somaita, Ahmed Fayez, Professor
Yaseen, Mahmoud, Professor

University of Damascus, Faculty of Economics
Grad, Kalaf Matar, Professor

University of Rome 3
De Filippis, Fabrizio, Professor of Agricultural Economics

University of Tishreen (Lattakia) Faculty of Agriculture
Fadlieh, Zakariea, Professor
Ghagah, Muhsen, Professor
Nosair, Samir, Professor

World Food Programme (WFP)
Akkad, Bashar, Programme Assistant
Ansary, Marwan, National Professional Officer
Kohine, Mohammed, Resident Representative

Women General Federation
Al Ahmed, Raghda, Executive Office Member
Kaddour, Hana', Chief, Foreign Relations Office

Annex 3 Texts of Opening Statements

The statement of H.E the Representative FAO in Damascus, Dr. Mahmoud M. Taher

Your Excellency the Minister of Agriculture and Agrarian Reform,
Your Excellency the Ambassador of Italy,
Your Excellency the Ambassador of Spain,
Your Excellencies the Representatives of UN Organizations in Syria,
High officials,
National staff,
Ladies and Gentlemen,

It gives me great pleasure to participate in the opening ceremony of the 2nd National Agricultural Policy Workshop, organized within the activity of the “Assistance in Institutional Strengthening and Agricultural Policy” Project implemented by the Food and Agriculture Organization of the United Nations (FAO) in collaboration with the Ministry of Agriculture and Agrarian Reform (MAAR). I had the honor to participate in the opening of the 1st Workshop held almost one year ago in coincidence with the beginning of my assignment as Representative of the Organization in Syria. Here we are meeting again to reconfirm our commitment to maintain our collaboration with the aim of improving the agricultural sector and enhancing its sustainable development.

The period between the two workshops witnessed a significant economic modernization, involving the agricultural sector and aiming at increasing the integration of the Syrian economy within the Arab and international economy. Some changes to be mentioned are the financial and fiscal policy reforms aiming at improving the finance and banking system, and the trade liberalization enhancement both on regional and international levels. The agricultural sector also has witnessed positive improvements, including redistribution of the state lands and rationalization of the fiscal policy with the objective of enhancing the agricultural investments and encouraging the role of the private sector in the area of agricultural marketing and processing. These developments were crowned with the assignment of a young Minister, who is a scientist specialized in agricultural economics, capable of leading the process of agricultural development in a way that matches the expectations of this country in growth, development and citizens’ prosperity.

I would like to take this opportunity to congratulate H.E Dr Nouredin Mona for the trust he has received from H.E President Bashar El Asad in nominating him as a Minister of Agriculture in the Syrian Arab Republic. I am confident that the cooperation links between FAO and the MAAR for the development of the agricultural sector will be strengthened to achieve the objective of food security in the Syrian Arab Republic.

The agricultural sector witnessed in the last few years qualitative changes that were accompanied by the broader development process of the Syrian economy. FAO had the honor to participate in these changes through the provision of technical support to a number of important projects in different agricultural areas. The Project on “Assistance in Institutional Strengthening and Agricultural Policy” has a special importance for its contribution to the formulation of the agricultural policy, to support the modernization and development of the agricultural sector, and to sustain the economic modernization process through the qualification of the required staff.

The Project has implemented in its first phase, 14 policy studies related to the main agricultural sub sectors and agricultural issues and policies. Three of these studies, namely: “Syrian-EU Association Agreement and its Impact on Agriculture”, “Water Resources Use in

Agriculture” and “Agricultural Development Strategy” have been selected to be presented in this workshop.

These three studies have been implemented with the support of highly qualified international consultants, who collaborated with teams of experienced national consultants from MAAR and the Syrian Universities, to ensure that the studies reflect to the maximum possible extent the reality and present situation of the issues they addressed.

Due to the success achieved by the Project on “Assistance in Institutional Strengthening and Agricultural Policy”, resulting from the close collaboration among all concerned parties, the Italian government, to which I would like to express appreciation and gratitude, has approved funding for a new phase of the project that started last November. The new phase will last for two years to complete the work started in the 1st phase, and to focus on supporting the NAPC, the first national specialized institution in the region in its field, recently established to form the core of the applied research in agricultural economics. FAO highly evaluates this tripartite collaboration that supports the sustainable development in the Syrian Arab Republic.

This workshop invites the views of a wide range of authorities, including NGOs, universities, international and regional organizations and public institutions concerned with the agricultural sector with the aim of enriching the studies presented and previously discussed with and cleared by the MAAR.

Once again, I would like to express my gratitude to the Italian Government for its generous support to this project which amounted to more than US\$ 6 million in the two phases of the project. I would also like to express my appreciation for the technical and scientific support given to the project by Italian universities, institutions and the Embassy in Damascus, resulting in reinforced relationship between the Italian Government, Syria and FAO.

Finally, I would like to thank H.E. Dr. Nouredin Mona for patronizing this workshop, the MAAR for its continuous support to Project activities, and to the consultants, technicians and the national staff who provided their experience to support the implementation of the project.

Thank you for your participation to this workshop. I hope that your interventions will enrich the studies presented and enable the National Agricultural Policy Center to lead the agricultural policy research and dialogue.

H.E the Ambassador of Italy, Dr. Laura Mirachian

Good Morning every body

Your Excellency Minister of Agriculture and Agrarian Reform, Dr. Nouredin Mona

Your Excellency the representative of UN in Syria

Colleagues form FAO headquarter, from Cairo and from Syria

Your excellency Ambassador of Spain

High officials from FAO, Italy and Syria,

organizers and participants to this workshop

A warm welcome to all of you today to this workshop, which I see as a significant step in the cooperation between Italy and Syria through FAO in the field of agriculture. I am particularly honored and pleased to meet here, for the first time, the Minister of Agriculture, Dr. Nouredin Mona, who took office last December and with whom I am sure we will be able soon to establish the best working relations. I also want to pay special tribute to the FAO Representative who, unfortunately, is not here today and to the staff of his office and to the Syrian personnel who are working daily in this project and making it a success.

We are dealing here with a sector, which is crucial for the economic and social development of this country. Our joint goal is primarily to enhance the capacity of Syria itself to operate in the field of agriculture, to identify strategies for agricultural development, to make the best possible use of national resources, to meet the challenge of interacting with the rest of the world and especially with Europe and the European market in view of the Association Agreement which is under negotiation.

This project is fully in line with the modernization process, which this country has decided to start under the leadership of H.E Dr. Bashar El Asad. I recall that it has four components: Institutional Building, Policy Advice and Support, Training, and the Database, and that the National Agricultural Policy Center, which is already in place and very active, will continue to be the focus of our operation. We would like to see this Center more and more involved in the Syrian policy making process.

This workshop will be an opportunity to discuss three of the technical reports prepared by the project on some very relevant issues: the use of water in agricultural production, the Syria-EU Association Agreement and its impact on Syrian agriculture, and the proposal for a development strategy for Syrian agriculture. These studies cover in substance the main issues to be dealt with in order to succeed in exploiting fully the potential of the agricultural sector in Syria. I am therefore proud that Italy committed to such a sophisticated and far looking project and that she decided last year, following the request of the Syrian authorities, to go forward in funding its second phase. This decision was made on the basis of the trust in the Syrian authorities and in FAO as implementation agency as well as on the basis of the positive assessment of the results achieved in the first phase, and implied the allocation of about \$ 3 million for the period 1 November 2001-31 October 2003. This is part of a more comprehensive Italian commitment in support of Syrian agricultural development, including programs in the dairy sector, water management and olive oil. In conclusion, I just want to underline my satisfaction for being here. I think that this crowded room is already in itself a signal of interest and of success for the people involved in this project and for all the Syrian actors. I wish you the best and fruitful working session today with many many wishes for further results.

H.E the Minister of Agriculture and Agrarian Reform, Dr. Nouredin Mona

Excellencies
Ministers;
Ambassadors;
Representative of the Arab and International Organizations
Ladies and Gentlemen

It gives me great pleasure to welcome you all in Damascus on the occasion of the 2nd National Agricultural Policy Workshop held within the activities of the Project GCP/SYR/006/ITA – Phase II “Assistance for Capacity Building through Enhancing Operation of the National Agricultural Policy Center” implemented by FAO within the Ministry of Agriculture and Agrarian Reform (MAAR) and with the support of the Italian Government.

This workshop is significant due to the contribution of the national and international consultants, University Professors and representatives of the public and private sectors who will discuss a number of studies carried out on some of the important issues for the Syrian agriculture.

Macro and micro policies have been given significant attention starting from the Correctionist Movement led by the late President Hafez El Assad in 1970 due to their importance for the economic development process.

Syria has adopted the economic diversification approach that enhances the contribution of all sectors (private, public and joint) to the economic development process. The agricultural sector has been given due attention due to its major contribution to the GDP which exceeds 30% and also to its crucial role in achieving the food security objectives, supplying the raw materials for the domestic industries and employment generation in agriculture as well as other sectors like transport and marketing.

The agricultural policies have been successful in achieving their goals in terms of cultivated area expansion and yield increase which in turn resulted in self sufficiency in terms of food staples and achieving the export surplus in wheat, dry legumes, cotton, vegetables, fruit and some livestock products.

The current phase is witnessing political and economic changes in terms of trade liberalization, economic groupings, globalization and information. These changes are pushing factors for all countries and especially the developing ones to take quick actions to comply with the new situation, taking into account the negative and positive impacts. Based on this, Syria is accelerating the process of agricultural development and strengthening its external relations. To meet this objective it has concluded several bilateral agreements with Arab countries, joint the Arab Free Trade Area and it is negotiating the Association Agreement with the European Union. Moreover, it has recently applied for the WTO membership.

Under the leadership of President Bashar El Asad, Syria is exerting big efforts for the modernization of economic, social, administrative and services sectors. This is done based on clear plans with the aim of improving the living standards for all population categories.

Huge efforts are also being exerted within the agricultural sector with the aims of quality improvement, inputs and services provision and marketing and export enhancement. It is also focusing on producing the crops that enjoy comparative advantage and help conservation of the natural resources.

This workshop is meant mainly to discuss the results of three of the 14 studies carried out within the first phase of the project namely: “the Implications for the Syrian Agricultural Sector of a Possible Co-operation and Trade Agreement with the European Union”, “the Utilization of Water Resources for Agriculture: Analysis of the Current Regime and Policy” and the “Proposal for the Agricultural Development Strategy for Syria”. Also it presents the organizational structure and functions of the National Agricultural Policy Center which is considered a unique institution in the whole region, which will basically work in the area of agricultural policy analysis, formulation, implementation and monitoring. It will also establish a policy forum.

The three studies have been carried out by high caliber international and national consultants who will present the conclusions of their studies hoping that they will help in the decision making process and in achieving the objective of food security in the country.

Finally, I would like to thank the Italian Government for its generous support and FAO for its efforts in the fulfillment of the World Food Summit commitments related to the reduction of hunger and malnutrition all over the world.

I wish all the success for this workshop in achieving its objectives in opening a dialogue and pushing forward the economic policies adopted by Syria under the leadership of President Bashar El Asad.