



ALAWUC/NE/06  
March 2006

**REPORT OF  
THE FOURTH SESSION**

**AGRICULTURE AND LAND AND WATER USE  
COMMISSION FOR THE NEAR EAST (ALAWUC)**

**Sana'a, Yemen  
7-9 March 2006**

**Food and Agriculture Organization of the United Nations  
Regional Office for the Near East**

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## **I. INTRODUCTORY ITEMS**

### **A. Organization of the Commission**

1. The Fourth Session of the FAO Agriculture and Land and Water Use Commission for the Near East (ALAWUC) was held in Sana'a, Republic of Yemen, from 7 to 9 March 2006, at the kind invitation of the Government of Yemen. The opening ceremony of the Commission was attended by 126 persons, including 57 official participants to the Session, partitioned as follows: 45 delegates from 13 Member Countries, 9 from 6 Observer Organizations and 3 from 2 Observer Countries.

### **B. Inaugural Ceremony**

2. The Commission was inaugurated by Mr. Abdul Malik Al-Arashi, Deputy-Minister, Ministry of Agriculture and Irrigation, Republic of Yemen, and Dr. Mohamad Albraithen, Assistant Director-General / FAO Regional Representative for the Near East.
3. Mr. Al-Arashi welcomed the participants and expressed his thanks to FAO and ALAWUC Member Countries for holding the Commission's Fourth Session in his country for the first time since the unification of Yemen. He expressed his wishes for a successful meeting of the Commission up to the expectations of its Member Countries and based on the positive outputs of the past sessions. He also indicated the challenges facing agricultural development in the Near East Region, including the need to sustainably increase food production and agricultural productivity; reduction of drought impacts in the Near East Region; enhancement of technical and economic cooperation between ALAWUC Member Countries; coordination in the field of information management, forestry and rangelands as well as in the field of plant protection. He further emphasized the need for elaborating and implementing effective policies and strategies aimed at sustaining natural resources and finding alternatives to alleviate the effects of water scarcity and to fight drought and desertification.
4. In his speech, the Regional Representative welcomed the participants, conveying the wishes of the FAO Director-General, Mr. Jacques Diouf, for a fruitful and successful meeting. He expressed his thanks and appreciation to the Yemeni Government, represented by the Yemeni Ministry of Agriculture and Irrigation, for their hospitality and excellent facilities made available for convening the Commission Session. He also emphasized the significant importance of the Commission which came to existence in 1997 and requested participants to give due attention during the Session for reviewing its needs in order to make it more effective and beneficial to all Member Countries.
5. Dr. Albraithen highlighted the topics on the Agenda and the information notes and stressed their importance and relevance to address the challenges facing agriculture and food security in the Region. He expressed the hope that participants will reach realistic and operable recommendations for enhancing agricultural development in the Region, urging countries to follow up on these recommendations and indicating FAO readiness to cooperate with them for their implementation. In addition, he indicated that the

number of papers and information notes covered by the Session has been reduced to allow more time for discussion, as recommended by FAO General Conference.

### **C. Election of Chairman, Vice Chairman and Appointment of Rapporteur**

6. The Commission unanimously elected Mr. Abdul Malik Al-Arashi, Deputy Minister, as its Chairman for the Session, and appointed Mr. Salem Bin Ali Al Maamari, from the Sultanate of Oman, as the Session Rapporteur. They further agreed that the Heads of Delegations from all other Member Countries participating to the Session would serve as Vice-Chairmen.

### **D. Adoption of the Agenda**

7. The Commission considered and adopted the Provisional Agenda (ALAWUC/06/1) and Provisional Timetable (ALAWUC/06/INF/2).

## **II. ISSUES FOR DISCUSSION**

### **A. Action Taken on the Recommendations of the Third Session of the Agriculture and Land and Water Use Commission for the Near East**

8. The document ALAWUC/NE/06/2 "*Report on Action Taken by FAO for Implementation of the Recommendations of the Third ALAWUC Session*" was presented. The Commission expressed its thanks and appreciation to FAO and its Regional Office for the Near East, for their commendable efforts in giving due consideration to the recommendations, through implementation of a broad programme of activities and projects during the past biennium.
9. The Commission reviewed the implemented FAO regional activities which focused on: 1) recent events on water resources and their implications for the Near East Region; 2) the progress achieved in developing strategies for drought mitigation and preparedness planning in the Near East Region; 3) integration of rangeland, pasture and livestock systems for sustainable agriculture in the Near East; 4) seed policy and regulations in light of the International Treaty on Plant Genetic Resources for Food and Agriculture and Cartagena Protocol on Biosafety; and 4) biotechnology in crop production in the Near East with specific reference to genetically modified crops.
10. Participants to the Session noted the procedures adopted by FAO for establishing its biennial work plan as well as the medium-term and long-term plans, based on the priorities of Member Countries as expressed during the holding of regional Commissions and FAO Regional and General Conferences. In addition, sectoral strategies and initiatives are also elaborated by the organization, within the framework of these plans and/or in response to specific needs as they arise.
11. The Commission noted the large number of projects elaborated and implemented by FAO during the past biennium, based on requests from Member Countries and regional economic commissions as well as the availability of funding sources, including FAO

Technical Cooperation Programme. These projects, which fall within FAO mandate and address priority areas in Member Countries, as well as the projects implemented by other development organizations often lead to important and relevant outputs. The Commission noted however that the activities of these projects and the output that result from them often end with the end of the projects and of their funding sources. They urged countries to ensure that the situation be reversed, by making the necessary arrangements to sustain relevant activities following successful projects. They also recommended that donors, funding sources and implementing organizations ensure such sustainability during project formulation, by including such components as evaluation, impact performance indicators and natural resources sustainability.

12. Noting the importance of non-conventional water resources for alleviating the burden of water shortage in the Region, particularly treated wastewater for use in agricultural production, and the potential treats associated with such use, participants stressed the relevance of the activities undertaken by FAO, particularly the support provided to Kuwait for the formulation a project aimed at establishing and International Centre for Research and Technology on Wastewater Treatment and Reuse. The Commission further urged countries of the Region to collaborate with the State of Kuwait for the establishment and adequate operation of the Centre, for the benefit of the Region. They further stressed the need for Member Countries to develop and adopt national standards for the safe use of these resources, including treated wastewater, brackish water and drainage water; and recommended that FAO and other concerned organizations assist countries in reaching this goal.
13. Realizing the important benefits of networking in ensuring exchange of experience, coordinating activities and addressing issues of regional dimension, the Commission urged Member Countries to lend adequate technical and financial support to the newly-established Regional Network on Wastewater Treatment and Reuse in order to make it fully operational and financially autonomous.
14. The Commission noted that water desalination is relevant as a means of supplying drinking water under the conditions of freshwater shortage, especially with technological developments that have made desalination for drinking purposes competitive with other alternatives. They also acknowledged that desalination for agricultural use, in the case of water shortage, is advisable and cost-effective only in the case of brackish water and for the irrigation of high value crops, stressing the need for practitioners to ensure environmental protection. The Commission further requested that FAO and other relevant organizations continue their efforts for the advancement of technology in order to make the use of desalination for agricultural production cost effective.
15. The Commission noted with satisfaction the activities implemented with the aim of building the capacity of Member Countries to develop national strategies and proactive action preparedness plans to mitigate drought and desertification impacts. They commended the emphasis by FAO on drought as a “priority areas approach” during the past two biennia and urged all countries and FAO to continue such efforts and to cooperate for establishing regional drought monitoring and early warning centres as needed. The Commission also recommended that countries cooperate for the updating

of drought-related data and information, and requested FAO to continue undertaking the update and supporting countries that have elaborated plans in their implementation.

16. The Commission stressed the need for strengthening cooperation among national, regional and international organizations and centers concerned with land and water utilization and management, with the aim of avoiding redundancies in projects and activities and reaching a higher level of synergy in terms of output. Of particular importance is the need for those organizations to have information exchange, coordination and standardization of methodologies, data sharing and linkages and compatibility of databases.
17. The Commission called upon Member Countries that have not nominated a focal point to the Commission to do so, in order to facilitate communication and ensure effective follow-up on the Commission activities. It further requested FAO to send a reminder in this respect to the countries that have not nominated a Focal Point.
18. The Commission stressed the importance of the seed sector in the Near East Region and requested additional support from FAO to Member Countries for developing good policies and strategies on the sector.
19. Noting that most problems and issues are known, the Commission emphasized the need to focus on recommendations that are realistic, practical and relevant to priority issues. In this respect, the Commission made the following recommendations for consideration by member countries, and with the support of FAO and other concerned organization, except as otherwise indicated:
  - Identify priorities on agriculture and land and water use and elaborate strategies and action plans well focused and targeted to address them
  - Give greater attention to land use, as a means of enhancing improved productivity of both land and water resources in a complementary manner.
  - In response to water depletion in many parts of the Region, countries should give due consideration to policies and regulations to address the issue. In particular countries should enforce water regulations and develop and implement such regulations in the case where they do not exist.
  - Promote efficiency and productivity improvement of water use in agriculture, including in particular through the introduction of water-saving irrigation technology where relevant, modernization of public surface irrigation schemes, the setting up of irrigation advisory services and capacity development of farmers and water service providers.
  - Enhance research on technology development and the selection of crop varieties and genotypes with greater water productivity under/ and tolerance of water stress conditions.
  - Develop country information systems as a means to enhance rationalization of water use in agriculture.

- Elaborate and implement a strategic vision on the development and implementation of projects, taking into consideration impact indicators, monitoring and evaluation and sustainability of successful activities and outputs
- Put greater focus on water harvesting and cloud seeding, through cooperation with concerned organizations and research centres, as means to address water scarcity in the Near East Region
- Strengthening the seed sector in the Near East Region through:
  - Harmonization of seed rules and regulations through a project supported by FAO, as it is the case in other regions like South Africa, East Africa, West Africa and Central Asia in order to facilitate seed trade within the region
  - Activation of the consultative forum which was previously established in the region (CFS-NENA) to assist member countries on all issues related to seed sector development, and integration of the West Asia and North Africa (WANA) Seeds Network.

## **B. Plant Protection and Plant Quarantine Systems in the Near East to Enhance Plant Health and Food Safety and promote Agricultural Exports**

20. The Commission considered Document ALAWUC/NE/06/3, entitled “*Plant Protection and Plant Quarantine Systems in the Near East to Enhance Plant Health and Food Safety and Promote Agricultural Exports*”.
21. The Commission thanked FAO for the initiative to compile such an important document which highlights the status of plant protection and plant quarantine systems in the NE Region; the way they relate to the promotion of food safety and the prevention of introduction, distribution and spread of plant pests in countries; and the phytosanitary and food safety requirements related to plant protection of importing countries and other trading partners.
22. The Commission noted that countries in the NE are increasingly liberalizing their agricultural sectors and opening up their markets by reducing or eliminating subsidies, or by entering into regional and sub-regional trading agreements such as the Arab Free Trade Areas (AFTA), the Gulf Co-operation Council (GCC), the Arab Maghreb Union (AMU), the EU Mediterranean Agreements and bilateral agreements and, most importantly, the global liberalization of agricultural trade whereby at least 16 countries are in the process of joining the WTO.
23. The commission further recognized that with trade liberalization, non-tariff barriers gain in importance, particularly sanitary, phytosanitary and zoo-sanitary measures that countries take to protect human, animal and plant life or health. Furthermore private entities like supermarket chains may set standards that products have to meet (Good Agricultural Practices) and such standards may directly relate to plant protection. Government-set regulations and measures that relate to plant protection include maximum residue levels of pesticides and toxins in food, and phytosanitary measures to prevent the distribution and spread of regulated pests with imported material.

24. Noting further that the competitive abilities of countries in the NE region, within the regional and international markets, are impeded by their inability to comply with the requirements of importing countries and private entities in such countries and to protect their own agriculture from the introduction of new pests, the Commission urged Member Countries to upgrade their plant phytosanitary measures in order to increase their competitiveness and to protect their agriculture.
25. The Commission acknowledged that the NE countries are facing the challenge of improving the access of their populations to safe food as well as improving the competitiveness and market access of agricultural exports, and protecting animal and plant health and the environment. It called upon Member Countries to set-up appropriate and credible services that are able to ensure the protection of local animal and plant health, ensure food safety and quality, and ensure that agricultural exports meet the requirements of their trade partners.
26. Recognizing international and regional programmes, agreements and treaties relevant to plant protection, food safety and trade in agricultural products, the Commission called on governments to establish or strengthen the existing national plant protection systems and urged specialized organizations, particularly FAO, to help countries in creating the rules that apply to all parties and in addressing issues that require supra-national action. The commission also called upon countries to make use of the several available international and regional programmes, agreements and treaties that, among them, help meet certain requirements of national plant protection systems.
27. The Commission noted that demand for imported plant products and vegetative materials of new plant cultivars has been increasing in the NE Region, in response to the increasing need to improve and diversify production both for local consumption and the export market. This, coupled with the great increase in internal and external trade and travel, has enormously increased the potential for the introduction of new plant pests. Several introduced pests have become established in the Near East region and cause serious crop and economic losses and hindrances to exports, e.g. Red Palm Weevil and Peach Fruit Fly.
28. Recognizing that these pests have resulted in damage to major crops in the Region, with subsequent reductions in yield, that the application of expensive control measures to contain these pests has increased production costs for producers and that pests of quarantine concern for trade partners will also result in a reduction of export possibilities, the Commission called upon Member Countries to upgrade their phytosanitary systems to prevent the entry and spread in the Region of a number of new pests, diseases and weeds.
29. The Commission noted that plant quarantine (including internal plant quarantine) has a vital role to play in protecting the Region's agricultural production. National Plant Protection Organizations are the main organizations concerned with and responsible for plant quarantine systems at the national level. They are responsible for undertaking plant protection surveys, updating information on national plant protection and pest situation, and the necessary actions related to plant quarantines including updating lists of quarantine pests, pest risk analysis, monitoring, control and management of all material entering the country as well as the issuance of phytosanitary certificates.

30. Recognizing that few countries in the Region have fully effective plant protection services, the Commission urged Member Countries to give due and timely consideration to this issue, in light of relevant international treaties and agreements, particularly the IPPC and NEPPO (when it comes into force) .
31. In many countries within the Region, phytosanitary regulations seem to be based on a fairly arbitrary list of organisms, which are regarded as a quarantine threat. The vast array of other organisms that have not yet impinged on the awareness of the quarantine authorities are rarely taken into consideration. There is a need to revise the quarantine pest lists, based on Pest Risk Analysis (PRA), and accordingly assess existing phytosanitary measures. Such information is also required to enable exports.
32. Regulations need to be enforced and the quality of Phytosanitary operations needs to be improved to ensure appropriate protection and to gain the trust of trade partners.
33. Information exchange among countries is imperative and is, therefore, mandated in the IPPC. Countries need to cooperate in the exchange of information on plant pests, particularly the reporting of the occurrence, outbreak or spread of pests that may be of immediate or potential danger. They need to communicate phytosanitary requirements, restrictions and prohibitions and their rationale, significant instances of non-compliance with phytosanitary certificates, list of regulated pests, adequate information on pest status and emergency actions. The Commission called upon Member Countries to exchange information through the International Phytosanitary Portal and the international Portal for Food Safety.
34. The Commission recognized that pesticides are still the most common measure used by farmers for pest control in the Region. It also noted that the extensive use of pesticides may have negative impacts on market access due to failure to comply with the required pesticides maximum residue limits.
35. The Commission noted that harmonization of Phytosanitary measures, as far as this is possible, will help countries to justify their own measures.
36. The Commission noted the efforts of FAO in promoting Plant protection and plant quarantine in different parts of the region emphasizing regional cooperation between countries

*Recommended Action by Member Countries:*

- Give priority to national plant protection and plant quarantine systems (NPPOs) and strengthen their national capacities as a means for enhancing quality control, promoting exports and protecting their own production;
- Where appropriate, update and harmonize their plant quarantine and plant protection laws and legislation. Where appropriate, consider cost recovery systems to ensure a secure base for their phytosanitary systems;
- Increase public awareness in areas of plant protection, particularly regarding pest spread starting from farmers down to consumers.

- Pay more attention to capacity building regarding agricultural extension workers and activate its role.
- Seek ways to make the best use of information available in the country and of scientific capacity available in Government and in academia;
- Seek synergies among food safety, animal health, plant health and biosafety, to make best use of resources where activities are closely related. Countries may wish to explore such synergies within a biosecurity context;
- Join the Near East Plant Protection Organizations;
- Participate fully in the international standard setting process, both in plant protection (IPPC) and food safety (Codex), by enhancing national structures, to ensure that their concerns are fully taken into account;
- Participate fully in information exchange through the International Phytosanitary Portal and the International Portal on Food safety, Animal and Plant Health;
- For countries which have not yet done so, become a Contracting Party to the IPPC;
- Adopt IPM participatory approaches as a national crop protection strategy and take all the necessary measures and policies to ensure effective implementation of this strategy, to improve food quality, enhance exports and protect the environment.

*Recommended Action by FAO and other Organizations:*

- Supports activities to revise plant protection legislation, including pesticide management legislation;
- Supports activities in the Region to strengthen and update the phytosanitary systems making full use of the Phytosanitary Capacity Evaluation tool.
- Provide Member Countries with technical assistance to enable them to join the international and regional related conventions and agreements.
- Supports activities on awareness, capacity building and information exchange for the establishment and management of the Near East Plant Protection Organization (NEPPO);
- Seeks resources to continue annual workshops on draft International Standards for Phytosanitary Measures and, in general, for participation of Contracting Parties in the region to participate in the standard setting procedure;
- Seeks resources to assist Contracting Parties in the region to participate in the information exchange among countries through the International Phytosanitary Portal;
- Provides technical and policy support to countries to strengthen their IPM programmes both at the levels of farmers and policy and decision makers.

## **C. Pathways for Improving Agriculture Water Productivity**

37. The Commission considered Document ALAWUC/NE/06/4 entitled “*Pathways for Improving Agriculture Water Productivity*”.
38. The Commission expressed its appreciation for the efforts exerted by FAO for preparing the paper which reviews a set of measures that have proved to be instrumental in several countries in reducing water consumption in agriculture and improving water productivity. The paper provides an overview of the experience gained worldwide, including the Near East region, and gives relevant policy recommendations to countries and FAO in light of the current trends in globalization and trade liberalization.
39. The Commission acknowledged that competition from domestic and industrial water users and the environment is growing and putting pressure on agriculture to ‘release’ water for other uses. For the irrigation sector this means producing more with less water and stresses the importance of the topics highlighted in the document.
40. Participants noted the relevance of the measures covered by the paper to many countries of the Near East Region and recognized that these measures are inter-linked and can potentially lead to increased water productivity, particularly when they are applied together and incorporated with other water demand management measures necessary for achieving integrated water management in agriculture, in public irrigation schemes. They also noted that some of these measures are more relevant and important than others depending on local circumstances.
41. The Commission noted that Irrigation Management Transfer (IMT) could incur such benefits as decline in government financing of operation and maintenance, positive contribution of Water Users’ Associations towards maintenance and improvements in irrigation services; however there is little evidence to show there is a positive impact on agricultural productivity and water saving. It was also noted that the existing experience stems essentially from countries where water shortage is relatively much less than in most Near East countries.
42. The Commission noted that the Near East Region has only limited experience in IMT, apart from Turkey, but many countries are progressing rapidly in its adoption. It urged Member Countries to be clear about the implications and benefits of pursuing IMT and to debate the models they wish to pursue. The traditional management of public irrigation schemes by governmental agencies could facilitate the adoption of an option that involves both government and water users in multi-tiered organizations. To this end, the Commission requested FAO to continue supporting Member Countries in the process of assessing their respective situations and adopting relevant transfer models.
43. The Commission recognized that training for both farmers and service providers is one of the critical components in the success of IMT, but there is a lack of useful, documented information on training initiatives, who undertakes them and how effectively they contributed to the transfer process. The experience on IMT is recent and cannot be evaluated at present. It requested FAO and other relevant organizations to work towards filling this gap by developing relevant guidelines for use by Member Countries.

44. The Commission noted that capacity development is a ‘soft’ – or socio-economic - solution that is inseparably linked to the other pathways that lead towards improved irrigation. In addition to technical training for professionals, technicians and farmers in support of infrastructure development, capacity development also includes the building of good organizations and strong institutional structures as well as a socio-economic environment that encourages rather than discourages successful irrigation development. The capacity required to sustain and develop irrigation should be a growing concern among government policy-makers, particularly in countries where irrigation is being modernized and institutional reforms are taking place. The Commission also noted that investment in capacity development is low and recommended to Member Countries and financing organizations to reverse this trend.
45. The Commission noted that the adoption of irrigation water services cost recovery could be an instrument for improved water allocation, better conservation and quality preservation; it can also induce better demand management of water resources. However, the linkages between water services charges, on one hand, and water productivity and conservation, on the other, are weak when pricing alone is considered as a solution. However, it opens promising avenues when integrated in a well-planned package of reforms and measures.
46. The Commission recognized that water services cost recovery has conditions and limits with the latter being imposed by the country’s economy, the physical and climatic conditions, the available market opportunities, the share of water services costs in relation to other costs of production, and the capacity of the country to meet the pre-requisites of successfully introducing a policy on water services cost recovery. In particular, farmers should be able to market their produce at prices that allow them to recover more than production costs and water services charges should not exceed a reasonable fraction of these costs.
47. The Commission also stressed that the objectives for charging for water services are often confused and that each objective may have different implications for the method of charging. Furthermore, not all objectives are synonymous with saving water and increasing productivity as part of a water demand management strategy. Therefore being clear about the objectives of introducing charges on water services is important for policy-makers to understand fully what they are seeking to achieve.
48. The Commission recognized that although the current emphasis is on ‘soft’ solutions for improving water productivity, ‘hard’ – hardware or infrastructure - solutions irrigation still have a pivotal role to play. Institutional and physical reforms should be combined and “soft” solutions are not just about transferring operation functions but also governance to irrigators. Modernization is what is needed and this requires a rethink that allows the new institutions to determine the kinds of technology needed – or possibly vice-versa.
49. The Commission emphasized that surface irrigation is still undoubtedly the most important method of applying water to crops, accounting for more than 95% of the 250mha of land irrigated worldwide (93% in the Near East), and this is likely to remain for the foreseeable future. It also recognized that modern irrigation methods have higher potential irrigation efficiency than conventional surface irrigation and their introduction should continue as a means of achieving greater water conservation.

50. The Commission also noted that the tendency to assume that improvements in irrigation management and water savings can be achieved simply by switching irrigation methods is not always true. In addition, it is not always practical from both a user and a financial point of view to transform all existing surface irrigation schemes to modern irrigation. Rather than dismiss surface irrigation and canal supply networks as inefficient it is incumbent to re-examine the reasons why this is so and to seek technology improvements alongside institutional reforms and other socio-economic changes. Innovative technologies are available for use both on-farm and in the irrigation network that can make supply systems more responsive to demand and ease the water management problems facing farmers.
51. The Commission raised a number of issues related to irrigation improvement, other than those covered by the paper. These issues which could be addressed in future Sessions of ALAWUC include:
- a. Irrigation performance assessment and improvement in private farms with independent wells,
  - b. Experience in the management of groundwater.
52. Recognizing water shortage as a priority that needs particular attention from all stakeholders in the Region, participants endorsed the content, conclusions and recommendations of the paper, emphasizing the following aspects:
- The starting point for increasing water productivity in agriculture is through the adoption of appropriate policies focused on water demand management, benefiting from experience from within and outside the Region.
  - The ‘pathways’ identified for improving water productivity include irrigation management transfer, capacity development, water services cost recovery and technology/modernization. Some are more relevant and important than others depending on local circumstances.
  - The pathways show that improving irrigation is a complex issue and there is no ‘silver bullet’ or single pathway that can achieve the goal. Each pathway has a role to play but they are very much inter-related and must all be ‘walked’ together. All the pathways can lead to improvements in irrigation but not all lead to improvements in water productivity. These pathways also have an associated cost which sometimes has not been fully considered at the initial stages of reforms
  - Traditional practices of public irrigation schemes rehabilitation should yield the way to modernization in the comprehensive sense of the term;
  - Capacity development of farmers and water service providers should be given due consideration in all initiatives and projects aimed at improving water productivity in agriculture;
  - Cost recovery of water services should take into consideration water rights of the poor layers of the population. In addition, care should be taken so as to avoid that

the adoption of recovery of water services cost does not result in increasing the prices of basic foods or in harming the environment.

*Recommended Action by Member Countries:*

- Develop and adopt policies conducive to higher water productivity and conservation in agriculture, with due consideration to resources sustainability and pollution control, and emphasis on groundwater management and the linkages between surface water and groundwater;
- Promote agriculture water productivity improvement through awareness, technological know-how and the introduction of appropriate management tools and practices;
- Increase the level of investment in institutional capacity development at all levels, including the training of services providers and farmers, to enhance better water use efficiency and productivity as priorities of irrigated agriculture;
- Assess the feasibility of adopting water services cost recovery and related measures as a means for enhancing better agriculture water management and achieving higher productivity;
- Promote the organization of agriculture water users, including for the use of treated wastewater, and facilitate their involvement and participation in water management;
- When rehabilitating open-channel surface irrigation schemes, give due consideration to improved allocation and flexibility for demand-oriented systems that can respond quickly and effectively to farm water requirements as an effective way of improving water productivity.

*Recommended Action by FAO and other Organizations:*

- Assist Member Countries in developing and adopting appropriate policies and strategies for agriculture water management prioritizing increased water productivity and conservation, with due consideration to resources sustainability and pollution control;
- Develop guidelines and training materials on agriculture water updated technologies and management tools adapted to the Near Region and assist Member countries in their implementation;
- Support Member Countries in setting up agriculture water users organizations, where relevant, and in transferring the management of irrigation schemes to them;
- Foster capacity development on agriculture water management and enhance regional cooperation on issues of regional dimension;
- Develop a regional project aimed at building the capacity of Member Countries to rationalize water use in agriculture,

- Prioritize cooperation between organizations concerned with agriculture water, coordinate their strategies, share information and cooperate in the promotion of water policy reforms in Member Countries and advocate for increased investment from all funding sources in the water sector.

### **III. CONCLUDING ITEMS**

#### **A. Information Notes**

53. The following documents were circulated as Information Notes:

- *Harmonization of Seed Rules and Regulations in North Africa and the Near East*
- *Water Desalination for Use in Agriculture*
- *Rift Valley Fever and Transboundary Animal Diseases in the Changing Environment of the Near East*

54. The Turkish delegation circulated copies of two presentations titled “Modernization of Irrigation” and “Irrigation Management Transfer plus Monitoring and Assessment”. The presentations were relevant to the paper on “Pathways for Improving Agriculture Water Productivity” presented and discussed during the Session and provided an overview of the Turkish experience on the subject. Participants expressed their thanks to the Turkish delegation for sharing this experience with them.

55. The Islamic Educational, Scientific and Cultural Organization (ISESCO) also circulated a report in Arabic titled “ISESCO’s efforts in the Field of Environment and Water Resources Management”. The report provides an overview of past activities by ISESCO as well as the organization’s strategy for future activities related to water resources management and environmental protection in its Member Countries. The Commission expressed its thanks to the delegate of ISESCO for the efforts of his organization and recommended that ISESCO and FAO cooperate for implementing joint activities.

56. The participant from the International Atomic Energy Agency submitted to ALAWUC Secretariat a written note as a kind contribution to the discussion and recommendations. As the note was received after the report had been approved by ALAWUC participants, it has been added as a separate addendum (Addendum 1) to the report, with only minor modifications.

#### **B. Subjects for Discussion at the Fifth Session**

57. The Commission considered various topics for discussion at the next Session of ALAWUC and recommended that the Agenda Items of the forthcoming Session be selected from the following items, giving priority to the topics not covered under past sessions and in accordance with the Commission’s mandate and responsibility :

- Progress made in wastewater treatment and reuse in the Near East, with inference to establishment of an international centre for research and technology in Kuwait;

- Situation of non-conventional water resources use and water recycling in the Near East;
- New developments in the use of brackish water for agricultural production in the Near East;
- Promotion of greater role of gender in agriculture water management;
- Avian Flu impacts in the Near East Region and the means to enhance the Region's capacity to cope with future episodes;
- Compilation of Regional experience on range and pasture management, with emphasis on positive achievements and lessons learnt in the Near East Region;
- Training needs to enhance country plant protection and quarantine systems;
- Role of drought monitoring and early warning systems in drought preparedness and impact mitigation as well as in desertification assessment and control;
- Capacity development for quality control of food for greater security and as a means to promote exports;
- Integrated management of fertilizers and irrigation water resources for increased agricultural production;
- Performance assessment and improvement of private irrigation from groundwater;
- Experience in governance and management of groundwater;
- Public irrigation scheme modernization in the Near East Region;
- Irrigation extension and advisory services to promote better management of irrigation water;
- Reform of agricultural products marketing rules and regulations in light of the new socio-economic changes;
- Role of private sector in financing and implementing irrigation projects;
- Valuation of water use in agriculture;
- Strengthening regional cooperation in controlling trans-boundary animal diseases;
- Strengthening of plant protection and plant quarantine capabilities in the region;
- Improvement of pesticide management in the region;
- Promoting Integrated Plant Protection and Production Management (IPPM) in the Near East Region.

### **C. Date and Place of the Next Session**

58. Since it is a standing decision that the meeting of ALAWUC be held back-to-back with the Regional Near East Conference, the date and venue of the 5<sup>th</sup> Session will be

decided and relayed to Member Countries once the date and venue of the next FAO Near East Conference is determined.

#### **D. Adoption of the Report**

59. The Commission adopted the report after discussing it and introducing amendments as deemed necessary.

#### **E. Closure of the Session**

60. Mr. Abdul Malik Al-Arashi, Chairman of the Fourth Session, made a statement in which he thanked the participants for their intensive discussion and high level contribution to the deliberations of the Session. He also thanked the Session Rapporteur and FAO Secretariat for producing a comprehensive report that reflects the deliberations and recommendations made by participants and which reflect the concerns of Member Countries and FAO. He also reiterated his appreciation to FAO Secretariat for the excellent organization and holding of the meeting, the quality documents prepared for the Session and the arrangements made for effecting the Commission to its successful conclusions. He finally expressed his wishes for a safe return back home to those leaving after the Session.
61. The Assistant Director-General / FAO Regional Representative for the Near East, Dr. Mohamad I. Albraithen, expressed the deep appreciation of FAO to the Government of Yemen in general and the Ministry of Agriculture and Irrigation in particular for their kind invitation to host the Session. He also thanked the Ministry of Water and Environment for its collaboration and hospitality as well as the delegates from Member Countries and the Observers for their deliberations and valuable contributions. He indicated his appreciation and thanks to the Chairman for conducting diligently the Session, the Rapporteur for assisting to capture the participants' views, the interpreters for providing an excellent job and to the Movenpick Hotel management for providing excellent facilities and services. He also thanked the National Organizing Committee for all the assistance provided and indicated that FAO and its Regional Office for the Near East will take into consideration the recommendations in future work plans and activities.
62. In a statement made by a delegate on behalf of participants, he expressed their thanks to the Government of the Republic of Yemen, represented by the Ministry of Agriculture and Irrigation and the Ministry of Water and Environment, for hosting the Session as well as for the excellent organization and hospitality. He also thanked FAO for the excellent job done in preparing high quality papers and for the help provided to Member Countries.
63. The Chairman wished participants safe journey home and declared the Fourth Session closed at 15:47 hrs. on 9 March 2006.

## Addendum I

### **Note from the Joint FAO/IAEA Division International Atomic Energy Agency**

#### *Recommended action by Member Countries:*

- Develop integrated research and technical projects that address integrated soil-water-nutrient management under rain-fed and irrigated conditions at the catchment level.

#### *Recommended action by FAO and other Organizations:*

- The Joint FAO/IAEA Division together with FAO can combine resources and technical know-how to assist Member States in developing integrated research and technical projects that use both isotopic and non-nuclear techniques to investigate integrated soil-water management practices on crop productivity and soil water status at both the plant rooting zone and ground water table on a catchment level.

- FAO, Joint FAO/IAEA Division and UNEP can combine resources to provide effective national/regional training programme on:

- a. Soil moisture measurement.
- b. soil-water management guidelines
- c. Tools and methods for assessing soil moisture status and water scheduling.

The aim of this training programme is to enhance crop water productivity and environmental sustainability.

#### *Concluding Items:*

(i) There are so many issues that are nominated for discussion at the Fifth Session but basically can be classified into two major themes: Land Management and Water Management. Will it be possible to split the second day and half of the first day of Commission into two Themes and then the Two Themes can be combined on the Third day to provide a comprehensive, overall overview of Land-water with a final draft ready by the end of that day.

(ii) We should continue with Land and Water Management Theme with particular emphasis on crop productivity and water (rainfall, wastewater, irrigation water and brackish water) management in both rainfed and irrigated conditions. Otherwise, we would have unfinished business on the main issues that the Commission has been addressing.

Genetically modified crops and organic farming could be two topics for some discussion. The issue of avian flu in the next two years, by the time of the fifth Session could pass beyond a critical stage. This issue may require a different format and timing. In addition, the participants will have to come from different disciplines.

(iii) "Experience in groundwater management" cannot be considered in isolation. In order for Member States to have a good picture of soil-water (not water alone) management on

water resource sustainability, it is important to have a comparative assessment of irrigation management practices and comparative assessment of different land uses (even in their simplest form of rainfed versus irrigation) on movement of water (and also nutrients) within and beyond the plant rooting zones.

(iv) The valuation of water use in agriculture is often considered in the context of irrigated agriculture. Farmers who work under rainfed conditions and have good management tools for improving soil and water conservation are not acknowledged under the Cost recovery that is currently proposed. However they are the ones who may contribute significantly to the recharge of groundwater and the optimum soil moisture conditions for subsequent growing crops. Should they receive a Water Credit (similar to the concept of Carbon Credit)? Therefore the statement of "valuation of water use in agriculture" should be addressed in the context of not only irrigated but also non-irrigated agriculture.

**AGENDA**

**I. INTRODUCTORY ITEMS**

- A. Organization of the Commission.
- B. Inaugural Ceremony.
- C. Election of Chairman, Vice Chairman and Appointment of Rapporteur.
- D. Adoption of the Agenda.

**II. ISSUES FOR DISCUSSION**

- A. Action taken on the Recommendations of the Third Session of the Agriculture and Land and Water Use Commission for the Near East.
- B. Plant Protection and Plant Quarantine Systems in the Near East to enhance Plant Health and Food Safety and promote Agricultural Exports.
- C. Pathways for Improving Agriculture Water Productivity.

**III. CONCLUDING ITEMS**

- A. Information Notes.
- B. Subjects for Discussion at the Fifth Session.
- C. Date and Place of the Next Session.
- D. Adoption of the Report.
- E. Closure of the Session.

## APPENDIX B

### قائمة بأسماء المشاركين

#### LIST OF PARTICIPANTS

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Secretary/Typist	Ms. Saadeya Ali, RNED

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