

**Association of Agricultural Research
Institutions in the Near East and North Africa
(AARINENA)**

**AARINENA
Towards 2000 and Beyond:
A Strategy for the Future**

by

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Introduction

1. The question of how to bring the collective views, concerns and aspirations of the agricultural research systems in developing countries to the attention of the international community continues to be difficult to answer satisfactorily. Still harder to answer is the question of how these national systems could effectively influence the international agricultural research agenda and be active partners in its determination.

2. In his book of 1986, Mr Baum, the second Chairman of the CGIAR, noted that including the developing countries in the Group's deliberation and decision making proved "to be a vexing problem that has not been fully resolved" [6]. Although much progress has been made since, the problem still poses a serious challenge to the Consultative Group twenty-six years after its establishment. Participation by developing countries in the deliberations of the CGIAR has increased considerably of late, but this has not necessarily resulted in a significant influence on the decision making process itself, particularly when it comes to funding-related matters.

3. In fact the Consultative Group confronted this issue at its very first meeting, in May 1972, where a number of alternative mechanisms to secure the participation of the developing countries were discussed, including the use of existing political organizations and regional development banks. At the end of the day, it was agreed that FAO seek the designation of one country- later changed to two- to represent each one of its regional groupings in the CGIAR meetings. Attendance by the designated countries was very poor to start with, and only after donor funding for their travel and participation was secured did this arrangement show some promise.

4. This arrangement improved over the years and has contributed reasonably well to debate in the CGIAR in recent years, but it has to be admitted that it did not totally live up to expectations. This apparent ineffectiveness could not be blamed solely on inherent weaknesses in the arrangement itself. Other factors have contributed, including differing perceptions among certain donors, especially in the early years, of the role of the representatives of the developing countries in the deliberations and decision making process of the Group. The progress in the status of National Agricultural Research Systems (NARS) from clients to that of full partners- was slow and not yet complete. It is interesting to note that it was not until 1996 that the CGIAR Technical Advisory Committee (TAC) formally added the term "partnership" to the Mission Statement of the Consultative Group.

5. While the FAO-Elected representatives continued to be the main formal mechanism at the CGIAR meetings, other initiatives meanwhile came into being. One such important initiative was the establishment of the International Federation for Agricultural Research Development (IFARD), which unfortunately is no longer active. The IFARD had three regional Chapters: Asia, Africa and Latin America, which left the Near East and North Africa Region falling between two stools. This omission led to the initial thinking of

establishing AARINENA to cater for the aspirations of the NARS of the region. This was followed by the establishment of the Asia-Pacific Association of Agricultural Research Institutions (APAARI). At the sub-regional level, there was an important and pioneering effort initiated by the Arab Fund for Social and Economic Development (AFSED) in the form of the Committee for Arab Agricultural Research (CAAR). Other sub-regional mechanisms were initiated in other regions especially in Africa.

6. These regional and sub-regional initiatives were an expression of a strongly felt need for bringing the collective views and aspirations of developing countries in the area of agricultural research to the note and action of donors and relevant international organizations. While these initiatives had variably successful track records, they served to pave the way for the current, hopefully more promising, undertakings. The time seems to be ripe for a meaningful and more pro-active effort to put the regional and sub-regional agricultural research associations and organizations on a stronger footing.

7. Much of the above concerns past developments and the lessons learnt. At present a greater sense of optimism is emerging regarding the potential role of national and regional agricultural research organizations. Three major developments have contributed to this new air of optimism and, as many hope and believe, they are ushering in a new era of true partnership between national and regional organizations on the one hand and the international research community on the other. These development are:

- The International Consultation on the National Agricultural Research Systems (NARS) Vision on International Agricultural Research, convened by IFAD on December 1994 and co-sponsored by FAO and ISNAR and a number of bilateral donor organizations. It should be noted that AARINENA was the first Regional Association to respond to this initiative by holding a WANA-NARS meeting for developing a detailed action plan on NARS-CGIAR partnership held at ICARDA Headquarters in 1995.
- The Global Forum on Agriculture Research (GFAR), which was established in October 1996 as a global framework to facilitate, *inter alia*, co-operation and research partnership among the various stakeholders in agricultural research and sustainable development [25]. It will be recalled that the NARS have decided to organize themselves within this framework by establishing a NARS Steering Committee and a NARS Secretariat, hosted by FAO in Rome [23].
- The European Initiative for Agricultural Research for Development (EIARD), especially, in this regard the statement from the European Donors at International Centres Week (October 1996) on mechanisms for regional and sub-regional cooperation in agricultural research [7].

8. AARINENA, together with other regional and sub-regional organizations, must strive to benefit fully from the opportunities resulting from the above mentioned significant changes in the international environment. To do so, the Association has to respond to changing circumstances with imagination and vigour, starting with the development of a

forward-looking vision and strategy. The present paper was commissioned with this purpose in mind.

The AARINENA Region

9. In compiling information on the Region relevant to AARINENA, one is faced with difficulties of nomenclature and area delineation, particularly as the Association is intending to add to its membership some, if not all, of the central Asian countries. The Region is alternatively known as WANA in CGIAR circles, short for the West Asia and North Africa Region, and as the Near East and North Africa Region, or RNE, in FAO jargon, with each having a slightly different country composition. Some organizations, for practical or mandate-related reasons, have included or excluded countries as in the case of ISNAR's definition of the WANA Region, which includes only 21 countries, as compared to 23 in ICARDA's WANA. In some other cases databases in a certain major organization may have different definitions of a particular region, a case in point is FAO's AQASTAT database which has a larger number of countries included under the Near East than in the formal FAO grouping with the same title. Also, many relevant and excellent reports and studies are limited to the Arab Region, which although covers the major part of the AARINENA region, it leaves out other countries of the region.

10. The information in the following sections is derived from various sources including FAO, ICARDA, AFSED, ISNAR and others. No attempt was made to extrapolate information to fit AARINENA's mandate area. Some of the figures cited, therefore, should be taken as indicative rather than absolute. In this regard, it is suggested that the AARINENA Secretariat might wish to look into the question of how to adjust the available data and information to the Association's mandate area.

11. Literature available from ICARDA, FAO and several other organizations gives comprehensive descriptions of the AARINENA Region, or parts thereof, which need not be repeated in great detail here. The description of the Region is, therefore limited to the most salient points and only as they serve the intended analysis [8;10;23].

The General Setting

12. The Region is physically vast, stretching over a land area of 18.5 million km² with marked variations in country size ranging from about 316 Km² for Malta to 2.5 million km² for Sudan. The population of the Region will soon hit the 600 million mark, with sharp variation among countries, ranging from 350 000 for Malta to 96 million for Pakistan. In general, the Region is considered among the less affluent parts of the world, and some of its poorest countries are also the poorest in the world.

13. Aridity is a prevailing feature in the Region, making it the poorest region in the world in terms of water resources, both globally and on a per inhabitant basis, despite the contribution of large rivers. While the Region covers nearly 14% of the total area of the

world and supports about 10% of the global population, it has only about 2% of the total renewable water resources. The land resources are characterized as being both limited and fragile; desert or semi-desert covers a staggering 70% of the total area, with 22% under pasture, leaving a meagre 8% as potential arable land [10].

14. The Region is rich in indigenous plant genetic resources, but most of its diversity is threatened by erosion due to increasing agricultural activities, including mechanization, urbanization, and habitat destruction by overgrazing. FAO estimates that the Mediterranean and North Africa sub-region and the West and Central sub-region have floras of 32 000 and 15 000 species of higher plants, respectively. A high proportion of this flora is endemic, with the highest plant diversity occurring in Turkey and Morocco [17;18].

15. The region contains three Vavilovian Centres of Origin of cultivated crops (Near Eastern, Central Asian and Mediterranean Centres). The region is a centre of diversity for a number of globally important crop plants, including cereals, food legumes, vegetables, fruit trees, forage plants, spices and condiments, and many ornamental and medicinal plants. Landraces can still be found in isolated and marginal areas, such as mountains and oases where traditional cultivars are still grown. The wild relatives of cultivated plants are threatened by agricultural activity expansion to marginal areas and to forest remnants, as well as by overgrazing and urbanization. Fragmentation of populations of these plants is the main cause of genetic erosion [5].

16. The Region also has a great wealth of livestock, representing, for example, 74%, 26% and 21% of the world total for camels, sheep and goats, respectively. The contributions of animal production to the national agricultural gross product differ greatly from one country to another and ranges from 16% in Syria to 81% in Mauritania. The region is the home of some renowned breeds examples are the Arabian horse, the Angora goat and the Awassi and D'man sheep. The richness of the region is indicated by the fact that its share of animal genetic resources is greater than its share of world livestock population [19].

The State of Food and Agriculture

17. The FAO publication State of Food and Agriculture paints a rather alarming picture of agricultural development in the region showing a further slowing down in agricultural production. The Region could not even maintain the already modest growth of 2% in 1994, and instead it slipped further down to 1.7% in 1995. The report notes that in spite of the greatly improved incentives introduced through domestic policies and higher international prices, “the region achieved limited success in the production of strategic crops, the diversification of the agricultural base and the enhancing of productivity of land and labour in the agricultural sector” [13].

18. As some 60% or more of the population of the region live in the rural areas and depend on agriculture for their livelihood, the decreasing agricultural production is

therefore not only affecting food security in general but also hampering poverty alleviation efforts. According to IFAD, it is estimated that in 1989 around 26% of the rural population in the region were living below the poverty line. Although the Region is doing much better than all the other developing regions, there are still considerable poverty pockets, masked by the richness of other parts of the region [26]. Once a net exporter of food, the region is now showing an ever-widening gap between food imports and production; a gap standing at more than 20 million tons for 1995-6. Only two countries in the Region, Saudi Arabia and, more recently, the Syrian Arab Republic, are exporters of wheat [13].

19. The FAO report, the State of World Fisheries and Aquaculture for 1996 indicates that none of the countries in the Region depends on fish and fishery products as a main stay of its economy [12]. Total production in 1994, for example, reached 2.8 million tons (world total 110 million tons), with the Moroccan landings representing more than 25% of the region's total catch. Annual food fish consumption varies considerably, from as high as 40 kg per caput in Yemen to as low as 0.1 kg in Afghanistan. In general, the contribution of the region to international trade in fisheries is rather modest.

20. Agriculture will continue to be a key factor in determining economic and food security prospects for many countries in the region. Tapping the full potential of the region and sustaining the quantity and quality of its productive resources represents "formidable challenges in several countries constrained by harsh natural and climatic conditions, where soil erosion, desertification, waterlogging and salinity have already reached alarming proportions" [24]. There is a growing consensus that much needs to be done, nationally and regionally, on research policies and management for agricultural growth and sustainable use of natural resources [28].

21. The situation of agricultural development as described above led ICARDA to conclude in a recent report that "food self-sufficiency, stated as policy objective in many countries of the WANA region, will prove an impossible task within this century and well beyond it for all but a handful of major food producers" [24]. This conclusion is supported by FAO's prediction for the year 2010 [3], which puts self-sufficiency in the Region at 76%. The ICARDA report speaks instead of self-reliance in food and pins much of the hope for achieving higher levels of it on a "combination of new technology, better farm practices, more favourable government policies, and more rational land use patterns" [24].

22. Most analysts will agree with the foregoing conclusion, that puts greater onus on the agricultural research and research-related support systems in the Region. Particularly as it is estimated by FAO that only 7% of the achievable increase in food production can come from expanding the areas currently under cultivation, another 21% from more intensive cropping patterns, leaving 72% to be achieved by increasing factor productivity. Such increases should be sustained at over 5% annually to meet the projected food and feed gap. This, as ISNAR rightly puts it, is the main challenge for all institutions working in agriculture. The question is: "How well prepared are the NARS in the Region to cope with their share of such a formidable task?"

The State of Agricultural Research

23. The Agricultural Research Systems in the Near East and North Africa (RNE) have been reviewed over the years by FAO with the last review being published in 1989 [9]. ISNAR in 1996 reviewed 21 of these NARS as part of the preparation of its strategy for the WANA region [27]. In addition there are a number of other reviews devoted exclusively to the Arab Countries, which form the greater part of RNE/WANA region [29;30;32;38;39].

24. It is remarkable to note how little improvement has occurred in the fortunes of the region's NARS as a whole over the last decade or so. The majority of them seem to be plagued by the same, if not greater, constraints and limitations in manpower, facilities, finances and managerial skills. Some success stories are, however, reported in the literature, indicating increases in the region's cereals production attributed to the impact of research resulting in wider use of high yielding varieties. Also, a number of countries have improved their overall management set-up and developed detailed master plans [25].

25. Agricultural research in the Region is carried out predominantly in governmental institutions and departments, and to a lesser extent in university colleges of agriculture. Only limited specialized research is performed by the private sector, although there is some evidence that it is on the increase in several countries. The role of NGOs in this regard is rather negligible. There is a dearth of hard data on the division of labour between the various sectors. One study on Arab agricultural research [33] shows that in 126 institutions "claiming to have a direct stake in agricultural research," 80% of the research force is in government ministries, 15% in colleges of agriculture, 4% in autonomous institutions and less than 1% in private or semi-public institutions.

26. Agricultural research in most countries is dispersed and poorly linked with other related activities and institutions within and outside the country. The FAO and ISNAR studies referred to earlier both count only eight to nine countries of the region (mostly small countries) which could claim a national mechanism of any sort for the coordination of agricultural research. In most other countries, research programmes are formulated and activities are carried out at the institutional level with little or no co-ordination at all with other relevant units in the country.

27. It follows from the above that most countries in the Region lack the institutional and other capacities to develop long-term agricultural research strategies truly reflecting national overall developmental policies and goals. In defence of the agricultural research systems, it should be added that this is mostly a reflection of a general lack of such capacities in the country as whole. Nevertheless, this represents a rather serious problem limiting the capacity of national agricultural research to be an effective partner in national economic and social development as whole.

28. The preceding brief description of the major features of the region serves as a backdrop for considering the future role of AARINENA, with its mix of serious challenges, great expectations and great opportunities. In developing its vision and strategy for the future, it is hoped that AARINENA will eventually emerge as an organization capable of facing the challenges and making the most of opportunities.

AARINENA Towards 2000 and Beyond:

Elements for a Strategy

29. AARINENA was established in 1985 as an autonomous body in accordance with the recommendations of the 14th and the 16th FAO Regional Conferences. These recommendations called upon FAO and Governments to take measures to strengthen cooperation among national, regional and international research institutions and centres through the dissemination and exchange of information, experiences and research results.

30. To this effect, a technical consultation on Agricultural Research was held, in collaboration with ICARDA and ISNAR, in Nicosia, Cyprus, from 17 to 19 October 1983. Delegation of 13 founding member countries participated in the meeting: Cyprus, Egypt, Iran, Jordan, Libya, Morocco, Pakistan, Somalia, Sudan, Syria, Tunisia, and the then two Yemens. Other participants were AOAD, FAO, ICARDA, ISNAR, CIP, CIMMYT and USAID. The meeting welcomed the establishment of the Association, and adopted the draft constitution. The Inaugural General Conference of the Association was held in Damascus, Syria, from 28 to 30 July 1985.

31. Currently AARINENA has 18 member countries, namely: Cyprus, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Pakistan, Palestine, Sudan, Syria, Tunisia, United Arab Emirates and Yemen. Four international and regional organizations: ACSAD, AOAD, FAO/RNE and ICARDA have also joined. The Association held five general conferences: in Damascus, Syria (1985), Nicosia, Cyprus (1987), Cairo, Egypt (1989), Cairo, Egypt (1994) and Rabat, Morocco (1996) [1;2].

32. In its meeting in Nicosia, Cyprus on 12-15 October 1997, the Executive Committee of AARINENA requested the Secretariat to commission a concept paper defining main elements for a strategy for future activities of the Association. It was generally felt that a new strategy would permit AARINENA to translate its evolving responsibilities into an action programme. It was agreed that the concept paper would be presented and discussed at the Sixth General Conference of AARINENA, to be held in Teheran, Islamic Republic of Iran from 10 to 13 May 1998. Hence, the present paper, which hopes to contribute to the ongoing efforts of revitalizing AARINENA to be better able to respond to the pressing needs of member countries and the changing regional and international environment.

33. In the following sections, detailed proposals are made for the consideration of the Association. They include proposals for a mission statement, definition of goals, slightly modified objectives and identification of technical and institutional research priorities. This is completed by a discussion of the main challenges facing the Association, and, in particular, proposals as to how it may respond to the financial and institutional challenges.

AARINENA's Mission

34. In formulating the Association's Mission Statement, due account was taken of the following facts and considerations:

- The region is food deficit and for many years now it has been the largest net food importer among developing countries. It is generally accepted that full food self-sufficiency is not attainable in the foreseeable future.
- The natural resources base in the region is very fragile with especially acute shortage of water and arable land.
- Despite affluence in some parts, poverty and food insecurity persists in the region.
- Much of the improvement in the agricultural sector would need by necessity, to come from research and technology development
- For agricultural research to play such a vital role, the individual and collective capacities of the national agriculture systems in the Region will require considerable strengthening.

35. In the light of the above, the following **Mission Statement** is proposed for AARINENA's consideration:

The Mission of AARINENA is to contribute to the enhancement of agricultural and rural development in the Region through fostering agricultural research and technology development and by strengthening collaboration in this regard within and outside the Region in order to achieve greater degree of self-reliance in food and agriculture, and to improve the nutritional well-being and overall welfare of the people of the Region, while at the same time sustaining and further improving the productive capacity of the natural resources base.

AARINENA's Goals

36. It is proposed that the Association, in collaboration and partnership with relevant organizations and institutions, set for itself the following goals :

- to contribute to the development of effective and well-endowed agricultural research systems capable of responding to the needs of agricultural and rural development;
- to assist in the creation of a conducive environment for collaboration and cooperation among agricultural research and related systems within and outside the Region; and
- to facilitate bringing the views, aspirations and agricultural research priorities of the region to the attention of the CGIAR and the GFAR/NARS component and relevant international and regional research, development and financial organizations and interested bilateral donor agencies.

ARRINENA's Objectives

1. It is proposed that two new objectives be added to the current objectives of the Association, which are repeated below for the sake of comprehensiveness, with the new ones in bold:

- foster the development of agricultural research in the Near East and North Africa Region;
- promote the exchange of agricultural, scientific and technical experience and information;
- **strengthen national agricultural research capacities for providing timely and necessary data and information to policy-makers;**
- encourage the establishment of appropriate cooperative research and training programmes in accordance with identified regional, bilateral or national needs and priorities.
- advise members on issues pertinent to research organization and management;
- strengthen cross-linkages between national, regional and international research centres and organizations, including universities, through involvement in jointly planned research and training programmes; and

- **assist in the mobilization of financial and other forms of support to all efforts aiming at strengthening agricultural research and technology development in the region.**

AARINENA's Priorities

38. Priority setting in agricultural research is a widely discussed subject in all studies on the state of NARS in developing countries. It is rightly considered as a very important step towards the formulation of sound agricultural research policy and programmes [4;31;36]. As far as the AARINENA region is concerned, there has accumulated over the years a number of reports that have dealt, in one form or the other, with priorities at national, sub-regional and/or regional levels [9;22;23;27;29;33;37;39;40].

39. Most of these reports are the work of individual consultants, but several have been produced by research institutions, often reflecting their researchers' notion of priorities. Few of these priority-setting exercises are a result of a comprehensive methodological work, nor do they necessarily reflect the real priorities of national or regional agricultural and economic development. Because of lack of data and information and policy guidance, most of these efforts in priority setting continue to be more of an art than science.

40. The recent attempt by AARINENA to examine the status of priority setting in the region is a timely and welcome step [35]. It has provided a reasonable insight and an update of the common wisdom prevailing in the region. The Association should consider refining this exercise regularly to compensate for gaps in the study and to improve its methodological base. It is of paramount importance for AARINENA to formulate carefully reasoned priorities that are well tuned to the needs of both the sub-regions and the region as a whole. Much work is particularly needed in the fine tuning of the sub-regional priorities, as that is where the interests of most donors seems to lie.

41. The following are the proposed main priorities for the AARINENA region under two major categories, namely technical and institutional research priorities. It should be noted that no priority ranking is being attempted here; such ranking may best left to each of the AARINENA sub-regional groupings.

42. **Technical Research Priorities**, both factor and commodity related, which are generally well recognized and where a fair amount of work remains to be done on many of them. This set of priorities includes:

- Water management and increasing water use efficiency.
- Land degradation and measures for its control, including soil conservation.
- Rangeland rehabilitation and management.

- Crop improvement for wide adaptability and/or tolerance to biotic and non-biotic stresses.
- Animal breeding and management.
- Livestock nutrition.
- Management and sustainable use of salt-affected soils.
- Use of saline and poor quality water for crop production.
- Sustainable use and management of dryland areas.
- Minimizing the inputs of chemical fertilizers and pesticides.
- Farming system research.
- Agroforestry research.
- Aquaculture research.
- Natural resource management.
- Biotechnology.

43. **Institutional Research priorities** are mainly policy- and management-related priorities, which have been well documented by FAO and ISNAR. AARINENA should continue to collaborate with these two organizations and others in bringing these priorities to the attention of its member countries through joint seminars, workshops or during scheduled meetings of the Association. The institutional research priorities include:

- Formulating agricultural research strategies at national and sub-regional levels.
- Improving all components of research management.
- Enhancing information systems at all levels.
- Strengthening collaboration among research institutions.
- Establishing formal mechanisms for linking research institutions with extension agencies and end users.

44. It should be pointed out that there is a renewed interest in certain priority areas as a result of certain global developments, growing consensus and new international agreements. These include, for example, genetic resources, integrated pest management and GATT related matters. Not all NARS of the region are equally aware of their

implications, which puts an onus on AARINENA to promote greater awareness and interest in them, particularly at the policy-makers level. In the case of plant genetic resources, for example, great interest has been generated by the Global Plan of Action on Plant Genetic Resources, adopted at the Leipzig International Conference [16], in which the Region played a major development. There is a need to maintain the momentum created, and AARINENA could be instrumental in this regard.

45. The area of integrated pest management (IPM) is not exactly an emerging priority, but recent concerns for the environment have revived interest in IPM applications. A Global Facility on IPM has been established, with sponsorship of the World Bank, UNDP, UNEP and FAO, in collaboration with other organizations and bilateral donor agencies. The Facility arranged a first meeting for the region not long ago in Fayed City, Egypt and participants issued what is now known as the Ismailia Declaration calling, *inter alia*, for the promotion of the use of IPM and strengthening of collaborative research in this area [15].

46. In the case of the GATT Uruguay Round, mention should be made of two agreements in particular, namely the Agreement on Application of Sanitary and Phytosanitary Measures (SPS) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). A number of interesting documents have been issued on the matter including a recent one on “*FAO Technical Assistance and the Uruguay Round Agreements*” and these may need to be brought to the attention of member countries of the Association [14].

Primary Challenges

47. AARINENA has come a long way from the early days of struggle for visibility, credibility and recognition. The Association now enjoys a greater degree of confidence from its members, and has become recognized by the international agricultural research community as de facto representative of the NARS in the region. The Association has taken a number of steps to strengthen its organization and coverage, notably the establishment of the five Sub-regions, establishing the Executive Secretariat in a host member country, and broadening its constituency to embrace the full spectrum of the NARS in the region. There is much reason for satisfaction, but some thirteen years from its establishment, AARINENA is not yet out of the woods. The Association still faces a number of challenges and its very survival will depend on how it chooses to deal with them. Two sets of primary challenges are considered in some details in the following sections. The first is related to securing sufficient resources for maintaining a viable programme and covering operational costs, while the second is concerned with adopting institutional and functional measures to effectively respond to changing national and international conditions.

The Financial Challenge

48. **The Co-sponsors.** The establishment of AARINENA in 1985 and its sustenance ever since has only been possible thanks to direct and continued support by the three co-sponsors FAO, ICARDA and ISNAR. The dependence of AARINENA on the Co-sponsors is bound to phase out as soon as the Association becomes able to rely on self-generated resources. However, the Association will continue to require the backing of its historical co-sponsors for a qualitatively different role to that of a direct financial support. Collectively, the co-sponsors are important in “imparting a legitimacy and assurance of continuity” to the Association as well as providing counsel and technical and moral support. Individually, they are equally important in providing specific assistance in the area of their competence. For these reasons, it is recommended that the Association preserve the “institution” of the co-sponsors, but at the same time asserting its autonomy and seeking additional ways and means to diversify the sources of the material support required for its future operations and programmes. These should be additional and complementary to the support the Association receives from its co-sponsors.

49. **Support Group.** For AARINENA to become the “efficient, effective and sustainable regional association” many hope and believe it can be, it would need to urgently broaden its financial support base. The Association should energetically explore all opportunities resulting from the CGIAR renewal process and other equally positive actions such as the European EIARD initiative. Serious consideration should be given to the idea of establishing a ‘support group’ as expounded by ISNAR and others. In this regard, a number of points need to be borne in mind:

- the establishment of a support group need not be necessarily seen as part of a process of “de-linking AARINENA from its co-sponsors”, if anything it should be considered as an enforcement of their role;
- the establishment of a support group should be presented and be seen as a means of strengthening agricultural research and technology development in the region, and not merely for AARINENA as an Association; and
- it is important to get the initial backing for the support group from the financial institutions and development agencies in the region.

50. As soon as the Association has adopted a strategy for its future work, it should immediately start to explore possible opportunities for forming such a support group. It is proposed that this could be a task to be entrusted to the co-sponsors with one of them taking the lead, assisted by the President and the Executive Secretary of AARINENA.

51. **Endowment Fund.** Endowment funds are funds donated permanently to an educational or other non-profit institution. Normally the capital of the original gift or donation is never spent, only the proceeds earned each year are used to support the institution’s programme. In some cases, donors to an endowment fund may allow full flexibility to the institution in the way it wishes to spend the proceeds each year. In other

cases, donors impose restrictions where the use of the proceeds is limited to specific purposes. The size of the endowment fund is dependent on the return on capital and the expected expenses to be covered, but it is generally estimated that it needs to be about 20 times greater than annual expected expenses [38].

52. It has been reported that the Latin America and the Caribbean Region has succeeded in establishing a large endowment fund, and that the Eastern and Central Africa Region is on the verge of having similar success, but with a less ambitious target. It remains to be seen if the AARINENA region could accomplish a similar feat, and if the Association would be in a position to spearhead such an initiative. Obviously, much will depend on the timing, approach and target for such an initiative, as well as on the overall mood and environment in the region. There were cases in the past in which the region demonstrated its generosity in supporting activities related to agricultural development in the form of sizeable regional cooperative programmes. Times have changed, and it remains to be seen if such a result is still possible. Some “ground truthing” would be necessary, and with careful planning and reasonable targeting it may just be possible to achieve a meaningful outcome. In this regard it may be helpful to:

- Explore the possibility of having a ‘patron’ for the cause of establishing an endowment fund, by inviting the support of some well-known and respected personality from the region.
- Explore the idea of having a small team of high ranking, well-known persons to act as “delegation of good will” to contact relevant authorities and organizations, in and outside the Region, to promote interest in the intended fund. This was done with success in the past, and some of the individuals who took part in it then may be willing to help once again.

53. **Administrative, Institutional and Operational Costs.** The move of the Secretariat to Cyprus is a step in the right direction, signalling the Association’s coming of age and heightening the “sense of ownership” amongst its members. Desirable as it may, this move will have serious financial implications for the Association. While it is possible that some donors may, as an interim measure, consider providing funding to cover some of the administrative and institutional (Secretariat and General Conferences) costs, these costs will eventually have to be fully borne by member countries. Operating costs, in contrast, are legitimate candidates for external funding. As establishment of an endowment fund and support group are likely to take some time to materialize, it is imperative that steps are taken to explore other options for securing financial and personnel resources for the normal operations of the Secretariat under the new arrangement. Among the options to be explored are:

- encouraging timely payment of membership fees;
- obtaining support from the NARS-SC Secretariat and the EIARD initiative, should their mandate allow such assistance ;

- exploring the possibilities of having one or two APOs assigned mainly primarily to assisting the Secretariat in the Sub-regions;
- setting up staff secondment arrangements with member countries, interested bilateral donors and others;
- imposing overhead charges for undertaking work commissioned from the Association by some organizations or donors; and
- ensuring continuation of part of the current support provided by the Co-sponsors and others.

The Institutional Challenge

54. The question of how to bring together all the actors involved in agricultural research is a vexing one at the national level, and consequently at the regional and sub-regional levels. AARINENA faces a double-edged challenge, for it to move “from a NARI to a NARS” Association, it has first to assist member countries to get their act together and establish an umbrella organization embracing all components of the agricultural research system in each countries. As mentioned earlier, the role of the private sector and NGOs in the majority of the countries in the region is either negligible, or at best not very well known or documented. Thus the proposal in a later section to review and assess the role of these two components with a view to enabling the Association to take the necessary measures to broaden its membership base. Obviously, the move from NARI to NARS will have a number of implications for the Association and its members, including constitutional implications, but this is not something which can be achieved overnight. The Association has other, more pressing, challenges to deal, with such as the one discussed below.

55. Donors are placing increased emphasis on sub-regional groupings. They are considered to offer more “cohesion amongst member nations due to their greater socio-economic and cultural affinity” and that they therefore should act as the main hub for operational and specific collaborative research projects. The newly established AARINENA sub-regional mechanism is, therefore, a good and timely response to this emerging emphasis, and hopefully it will lead to greater efficiency in the Association’s operations and an enlarged membership. Much, of course, will depend on how these regional groupings are structured and what functions are assigned to them. Some proposals to that effect are discussed below.

Structure and Functions of the Sub-regional Groups.

56. In considering the structure and functions of the sub-regional groups, it should be realized that the sub-regions differ in their agriculture potential, the state of their agricultural research, and their policy environment in general. This implies a need for

some flexibility in the design of their structures to allow for their natural evolution over time. It is also important to agree on the degree of autonomy the sub-regional groups should have in relation to Association's apex, and what should be the division of labour between the two.

57. In its 1996 study [27], ISNAR suggested a structure for the sub-regional groups in the form of a 'governing body' comprising one official representative of each of the NARS in the countries of the sub-region. The Governing Body would: serve as think tank; provide a contact point with IARCs, donor countries and co-operating organizations; followup the implementation of projects; establish links with other sub-regional groups; and represent the sub-region at AARINENA meetings. This proposed structure may serve the long-term needs of the Sub-regions, but at this stage it is rather heavy and not sufficiently flexible, and risks adding another unnecessary layer of command.

58. Instead, it is proposed that each Sub-region initially select a "Coordinator" who will be responsible for getting the members of Sub-region together. As possible and appropriate, maximum use should be made of venues and facilities available in the sub-region. It is proposed that the functions of the Coordinator include the following:

- assisting the Sub-regional Groups in deciding on its modus operandi and the way it organises its work and how it relates to other political and technical groupings in the sub-region;
- serving as contact point with the other AARINENA Sub-regional groups, as well as with the CGIAR centres, donor agencies and relevant organizations;
- acting as clearing house for regional and sub-regional projects and follow-up of their implementation; and
- representing the Sub-region in the meetings of the Executive Committee.

59. The Constitution of AARINENA does not clearly specify a role for the sub-regional groupings in the governance of the Association as whole. To correct this, the Executive Committee should be reconstituted to comprise the President, Vice President, the five elected sub-regional Coordinators and the Executive Secretary as an *ex officio* member. The President should be selected on his own merits and qualities of leadership without regard to sub-regional rotation or other considerations. This should ideally apply to the Vice President, but to keep the Executive Committee to a manageable size, the Vice President could be initially selected from the elected Sub-regional Coordinators.

Horizontal Mechanisms

60. A number of issues of strategic nature are of common relevance to all the sub-regions and would need to be treated by the Association at the regional rather than the sub-regional level. Therefore, in addition to the above-described structures and arrangements for the sub-regions, the Association may wish to consider ways and means to deal with

cross-cutting issues of relevance to all the sub-regions. Whatever mechanism is chosen, it must be light in structure and flexible in operation, as well as being cost-effective in general.

61. A number of alternative ideas for such a mechanism were examined including the use of existing national institutions for that purpose, commissioning the task to relevant and willing international or regional organizations, or simply resorting to the help of consultants. Although these alternatives have their merits, none meets all the criteria described above and, additionally, they may prove to be cumbersome to handle for the Secretariat. Instead, it is proposed to constitute small panels comprising of individuals chosen on their personal merits, to deal with the cross-cutting issues of common relevance. To save on cost, panels need not meet frequently and should make maximum use of modern means of communication. Some donors and/or organizations may decide to support the work of the panels of interest to them.

62. There are a number of areas of common relevance to the countries of the region which lend themselves to this modality, but only the most pressing ones should be considered at the moment. Three issues are chosen as possible candidates, bearing in mind that they may be of particular interest to some individual or group of donors:

63. **Panel for Inter-regional collaboration**, to explore opportunities for collaboration and joint research project and networks, starting with the European Region, particularly in the light of the EIARD initiative. An internationally known individual from a country enjoying membership of both the AARINENA and the European regions would be the best choice for leadership of this Panel.

64. **Panel on the role of the private sector**, in agricultural research in the region. This issue increases importance as AARINENA is called upon to broaden its coverage to embrace all component of the NARS in the Region, including the private sector. The roles of the public sector and the colleges of agriculture are well documented, but in contrast, , the role of the private sector and NGO is less known, and poorly documented. Reports on the NARS in the region point to a rather limited private sector role, although in a number of countries that role seems to be increasing. This is a topic of interest to many donor agencies and several international organizations, which justify establishment of a panel for this purpose. Leadership of the panel could come from one of the countries reported to have an active emerging private sector. The panel would also look into the role of NGOs.

65. **Panel for Resource mobilization**, for agricultural research and technology development in the region, as discussed in the preceding sections dealing with the financial challenges faced by the Association. The panel would discuss and develop a strategy for the Association to adopt in this regard. It may be possible to attract the interest of a leading personality to assume leadership of this panel, working in close collaboration with the Co-sponsors.

Public Relations Drive

66. Once a strategy is developed and approved, AARINENA may require expert assistance in the formulation of an enlightened public relation policy to improve its overall visibility and attract greater support. Several steps have been taken in this regard in the past few years, notably the Newsletter and other measures, but there is as always room for improvement. While the development of the actual public relations policy has to await the expert input, two areas would deserve mentioning here.

67. The first area relates to bringing the Association nearer to policy-makers to attract their attention and gain their support. As operational and collaborative research projects will increasingly be the responsibility of the sub-regional groups, more attention should be devoted to the Association's strategic concerns at the Regional level. The second area relates to information exchange and communication, particularly through increased use of the opportunities offered by the Internet. The two areas and tentative proposals for their implementation are discussed below.

68. **Venues for the General Conference.** The Conference of the Association meets once every two years in regular session at a venue to be agreed on at the preceding session. The Association may, as the need arises, hold extraordinary or special sessions. Member countries have always shown great interest and generosity in hosting the General Conferences. It is noted, however, that these meetings are normally held in isolation from other events or gathering involving decision-makers and high-ranking officials of the Ministries of Agriculture or other relevant ministries. As part of AARINENA's push for recognition and support, it is proposed that consideration be given to occasionally holding the General Conferences in conjunction with important events, or gatherings such as the Meeting of the Governing Council of IFAD, the Ministerial Meetings of AOAD or the Regional Conferences of FAO. The last-named will be discussed in some detail as an illustration of the proposal, but similar cases could be made for other meetings.

69. FAO holds Meetings for all its Regional Groupings every two years (on even years) alternating with its General Conference. Senior officials from Ministries of Agriculture and other related Ministries attend these meetings, and Ministers or Under-secretaries more often than not head delegations. Observers from countries outside the region also attend these meetings, as well as representatives from relevant UN- and other international and regional organizations. Each Regional Conference discusses wide ranging agricultural and rural development related matters in the Region, as well as progress achieved in the intervening years. In addition, it considers a standing item devoted entirely to agricultural research in the Region and to the election of its two Representatives to the CGIAR [11].

70. Admittedly, the discussion on the agenda item on agricultural research has not always been lively and mostly is limited to the business of electing the Representative to the CGIAR, which is normally reached by consensus. In recent years, however, considerable improvements have been introduced in the documentation for this agenda item, including a section on the state of agricultural research in the Region, which has increasingly

attracted greater interest among participants. In the view of the writer, the agricultural research community has not taken sufficient advantage of the opportunity offered by such meetings.

71. It is proposed that AARINENA actively participate in the FAO Near east and North Africa Regional meetings, starting from the next one to be held in the year 2000. Consideration should also be given to holding some of the Association's General Conferences or other meetings in conjunction with the Regional Conference itself. This may present some logistical difficulties for the host country and the organizers of the Regional Conference, but the result could very well justify the additional effort. AARINENA might also consider assuming responsibility of preparing a comprehensive yet concise report on the State of the Agricultural Research in the Region, to be tabled, if feasible, at the Regional Conference, or provided as additional background documentation. The Association would need to commission such a paper every two years in consultation with its Co-sponsors and other relevant agencies.

72. Information Exchange and Communication. The information exchange within the Association would be greatly facilitated through the establishment of a suitable set of internet-based services [34] as considered below:

- Web site, to be used to present the Association's activities to the public and to donor agencies. Appropriate areas could be established to focus on specific topics of interest, provide access to databases, discussion areas and other services.
- E-mail service, to provide the foundation for a wide set of other services. All relevant users would be provided with an account, and mailing lists could be setup for information exchange or discussion on specific topics.
- Database access, as where relevant, databases could be published on the Internet to provide efficient dissemination of information as well as to effect data updating and maintenance tasks. Full access control would ensure only authorized users were given access.
- Internet publishing, would allow reports, newsletters and other publications to be very effectively disseminated through the Internet as they can reach a potentially larger community. Document availability is maximized and timeliness of information is increased.

73. Beyond the services outlined above, that usually address the general public, a full array of services could be implemented to facilitate information exchange within the Association and its sub-regional groups. In general, this amounts to a restricted version of the public services with different levels of access security applied according to the confidentiality of the information being exchanged.

The Tasks Ahead

77. The next two years until the next General Conference may prove to be the most crucial years in the Association's existence. The consolidation of gains achieved so far as well as the successful launching of AARINENA into the next century will very much depend on decisions and actions taking during this period. The Association has already made a good first step in that direction by deciding to develop a new strategy to guide its work in the years to come. The position paper presented here has attempted to identify elements for such a strategy, and made certain proposals for the consideration of the Association. Actions called for in five key areas:

78. **Task One:** Finalizing the Association's Strategy and translating it into a concrete Plan of Action. In this regard actions to be taken would include:

- Reviewing the Constitution and suggesting for the consideration of the Conference necessary amendments, including incorporating the new mission statement, the goals, the expanded objectives and proposed priorities, together with other institutional arrangements;
- Preparing a brochure reflecting a positive image of a renewed and reformed AARINENA, spelling its mission, goals, objectives, priorities and mechanisms, to be used as part of an enlightened public relations drive;

79. **Task Two:** Adopting measures to place the newly established sub-regional entities on a firm functional and operational foundation, as they are likely to be the focal point for future donor support. Measures could include those below:

- Delineating the AARINENA Region with a view to adjusting the available data and information to the Association's mandate area.
- Reviewing and fine-tuning the research priorities for each sub-region, a task which the Sub-regional groups themselves need to undertake with the assistance of the Secretariat and relevant organizations.
- Developing a workable structure for the regional groupings, with a sufficient degree of flexibility to allow them to evolve over time as experience is gained.
- Defining the functions and responsibilities of the sub-regional groups vis-à-vis their constituencies, the region as a whole and the apex of the Association.
- Defining the role of the sub-regional groups in the overall governance of the Association, and introducing adjustments in the bylaws accordingly.

80. **Task Three:** Formulating policies and initiating actions so as to enable the Association to broaden its financial support base, including the activities below:

- Exploring, with the help of the Cosponsors, the possibility of establishing a support group of donors from inside and outside the Region.
- Soliciting the advice and support of influential and experienced persons regarding the prospects of establishing an endowment fund for agricultural research and technology development in the Region.
- Seeking financial and personnel support for the Association's operations and administration of the Secretariat in the new headquarters in Cyprus.

81. **Task four:** Devoting more time to deal with strategic issues relevant to the Region as a whole, particularly seeing that from now on specific collaborative work will increasingly be carried out at the sub-regional level. For this purpose, it is proposed that small, task-specific panels be established, including in the areas below:

- Inter-regional collaboration to explore in particular opportunities arising from initiatives such as the European EIARD scheme.
- Increasing private sector involvement in agricultural research activities in the region.

82. **Task Five:** Pursuing a proactive public relations stance to enhance the Associations image, particularly among policy makers at the highest possible level, and to promote interest in agriculture research in the Region. This could involve the actions below:

- Holding some sessions of the General Conference in conjunction with major agricultural Ministerial and/or other high-level meetings with an agricultural theme.
- Undertaking the preparation every two years of a comprehensive report on the State of Agriculture Research in the AARINENA Region.
- Improving information exchange and communication by making maximum use of internet-based services.

83. These tasks, formidable as they might appear, should not be impossible to achieve, given the interest and support the Association is increasingly enjoying within and outside the Region. They must be achieved considering the great expectations and hopes pinned on agricultural research and technology development to meet the many daunting challenges faced by agricultural and rural development in the Region.

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