WORLD HEALTH ORGANIZATION

Regional Office for the Eastern Mediterranean

ORGANISATION MONDIALE DE LA SANTÉ

Bureau régional pour la Méditerranée orientale

SEMINAR ON THE PREVENTION AND CONTROL OF VECTOR-BORNE DISEASES IN WATER RESOURCES DEVELOPMENT PROJECTS

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Training Personnel

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The problem of vector-borne diseases related to man-made breeding places and water resource development scheme does not fall within the responsibility of one organization or even one professional group. This is a multi-disciplinary responsibility which involves planners, designers, constructors, irrigation engineers, agronomists, health officers and farmers. Therefore various types of education and training programmes are necessary in this context.

1. Public Education

No public health programme can be expected to succeed, for example, without full cooperation from the people and their active support and participation can be obtained only if they thoroughly understand the problem. Consequently, public information and public awareness comes on the top of the list for training purposes. This educational information can be provided by utilizing all appropriate avenues, including radio and television, films, exhibits and displays, publications, newspapers articles with pictures, posters and signs demonstration and personal contacts in homes and farms. School teachers could play an important role with regard to the health education of their pupils, who became "health agents" in their families.

2. Training of Professionals Involved

The professional groups involved in water resources development play a major role in the implementation of preventive measures from designing stage up to operational stage of the schemes.

There is a need for basic training for this group on the health hazards of water resource development schemes and methods of preventing them and, as well, on legislation regulating the implementation of such schemes. Some of these training may be done in universities, engineering colleges, technical schools, and their appropriate educational institutions. It may be sufficient to include in their regular curricula, a course on environmental changes occurring in man-made lakes and irrigation systems and on proper designs to minimize these changes which favour vector breeding.

Training of professional may be carried out by organizing short courses, workshops and in service training under experienced personnel in this field.

In these short courses the following subjects could be covered:

1. Major vector-borne diseases related to water resource development projects

2. Biology and ecology of vectors and intermediate hosts involved in transmission of these diseases

3. Different methods of vector control

   - Chemical
   - Biological
   - Environmental management
   - Elimination or minimizing the breeding places by engineering methods

4. The role of different agencies in control of vector borne diseases in water resources development and ways and means to coordinate their efforts

5. Formulating overall policy, plan of operation and action for the vector control in water resource development schemes

6. Cost analysis of initial investment for vector control by provision of necessary design, for the scheme, to minimize the breeding places versus continuous vector control programme and treatment of the cases. Conferences should mainly promote the close cooperation of various ministries including the Ministry of Health and other central agencies in the planning and implementation of water resources development projects.

3. Planners and Programme Managers

Those involved in planning and managing the programmes at high level in national organizations could be briefed through the attendance of seminars, symposiums or conferences related to health hazards of the water resource development schemes. Such seminars and conferences should mainly promote the close cooperation of the various ministries including the Ministry of Health and other central agencies in the planning and implementation of water resources development projects.

4. The Role of International Agencies

Quite a few international and bilateral agencies are involved in planning, investment, consulting and operating the water resource development schemes. Some of these organizations are UNDP, FAO, WHO, UNICEF, UNEP, UNIDO, Comité Inter-Africain d'Etudes Hydroliques, IBRD, USAID, and CIDA. These organizations could establish a coordinated policy for training and staff development for these types of projects.

4.1 They should require to have a public health component in the training programme of the project staff.

4.2 Organize observation tours and field training in these projects which have implemented preventive measures for vector control in the design and operation of the scheme.

4.3 Provide advice or often a combination of advice and training by sending consultants for a short or long period as necessary.

4.4 Arrange and support international and national seminars on this subject and encourage multi-disciplinary participation. This would provide a much broader spectrum of subject matters that might be included in the training.

4.5 Sponsor fellowships in favour of the technical and managerial officers of water resource development projects in proper institutions to familiarize them with the related health hazards and methods of their prevention.

4.6 Organizing research centres for study of the problems and find solution for it.

4.7 Preparation of a manual for officers and engineers involved in design, construction and operation of water resource development schemes. This manual must explain and illustrate the proper designs and devices to be utilized for minimizing the public health hazards in waterresource development projects.

4.8 Prepare educational material, books, articles, slides, films, etc. for distribution to countries, projects, educational institutions, etc.