WORLD HEALTH ORGANIZATION

ORGANISATION MONDIALE DE LA SANTÉ

EB59/WP/3
2 December 1976

INDEXED

EXECUTIVE BOARD

Fifty-ninth Session

Provisional agenda item 13

REVIEW OF THE PROPOSED PROGRAMME BUDGET FOR 1978 AND 1979 (FINANCIAL YEAR 1978)

DEVELOPMENT OF THE ANTIMALARIA PROGRAMME

Report by the Director-General

1. Introduction

1.1 In 1969 the Twenty-second World Health Assembly, in resolution WHA22.39,[1] endorsed the proposals made by the Director-General for the revision of the global strategy of malaria eradication. In pursuance of resolution WHA27.51 adopted by the Twenty-seventh World Health Assembly,[2] in January 1975 the Director-General submitted a report to the fifty-fifth session of the Executive Board, reviewing the programme situation and its prospects in various WHO regions, taking into consideration the epidemiological situation, the degree of implementation of the measures proposed under the revised strategy, and the factors affecting progress. In his report to the Twenty-eighth World Health Assembly, in May 1975, he again reviewed the basic factors conditioning the programme and the overall problems affecting its progress, and proposed practical methods for the implementation of the earlier recommendations. In 1976 the Executive Board, its Ad Hoc Committee on Malaria and the World Health Assembly all expressed their concern over the worsening malaria situation and urged malarious countries to revise their antimalaria plans and programmes on a realistic basis.

1.2 However, the decision to shift from the well-defined objectives and activities of time-limited malaria eradication to the uncertainties of long-term malaria control programmes requires considerable courage in view of the technical, financial and political implications; moreover, the possible partial or total loss of very significant investments made in the past and the apparent loss of prestige might be interpreted as an acknowledgement of failure.

1.3 The change from rigid strategies to flexible, realistic and pragmatic approaches requires a high level of malariological expertise which, because of the relative simplicity of malaria eradication techniques, has faded away during the 15 years of implementation of this type of programme.

1.4 For a solution of the problems the malarious countries would have to take the following main steps:

(a) assessment and revision of the programme objectives in accordance with the epidemiological situations;

(b) adoption and testing of antimalaria methods appropriate to the epidemiological circumstances;

(c) development of the expertise required for the adaptation of activities to the programme objectives; and

---

[1] WHO Handbook of Resolutions and Decisions, Vol. I, 1973, p. 80.

[2] WHO Handbook of Resolutions and Decisions, Vol. II, 1975, p. 11.

(d) securing the necessary manpower and financial resources to meet programme requirements.

1.5 In view of the deteriorating epidemiological situation, particularly in countries of South-East Asia and of Middle America,[1] the application of these measures is becoming a matter of urgency. In 1975 many countries widely applied the resolutions of the WHO regional committees and the recommendations of the Executive Board's Ad Hoc Committee on Malaria,[2] as endorsed by the Executive Board in its resolution EB57.R26[3] and the Twenty-ninth World Health Assembly in its resolution WHA29.73.[4] However, the development of the epidemiological research programmes and the revision of the staff training policies are still awaited.

2. Action taken

2.1 The disquieting situation has led a number of countries to intensify their efforts and to try to adapt their strategies to the epidemiological situation and the available resources. Thus, after an appropriate assessment, several Middle American malaria eradication programmes have been converted into long-term integrated malaria control programmes in view of serious technical problems (multiple resistance of vectors to insecticides, exophilic behaviour of vectors, or population migration), administrative insufficiencies (limitation of financial resources or weaknesses of the organizational structure) or the consequences of natural disasters (earthquakes, cyclones, or floods). In the South-East Asia Region the worsening of the epidemiological situation and the scarcity of resources have led some countries - e.g. India and Thailand - to adapt progressively the antimalaria programme objectives to existing needs. Pragmatic programme revisions have also been made in some countries of the Eastern Mediterranean Region (e.g. Afghanistan, Ethiopia and Pakistan). In the Arabian Peninsula coordinated antimalaria activities are envisaged in Saudi Arabia, Oman, Democratic Yemen and Yemen.

2.2 The African Region experiences enormous difficulties and hesitation in implementing the antimalaria strategy as approved by the Regional Committee for Africa in 1973; however, the decision taken by Nigeria to launch a countrywide malaria control programme may stimulate other countries of the Region to adopt a more aggressive attitude in their antimalaria activities.

2.3 After reviewing their objectives and deciding to implement long-term programmes, several countries have become acutely aware that programme delivery should ideally include community involvement. However, in many instances population participation is still in the early planning stage or has remained a desire which is still far from implementation. There are several examples to illustrate the situation: in Nigeria it is intended to stimulate the participation of the population in the activities of the antimalaria programme which is at present being planned; in the Central African Republic, Senegal and the United Republic of Cameroon the rural population participates financially in the purchase of antimalarial drugs for community protection; in several programmes in the Americas voluntary collaborators have contributed to malaria surveillance activities for many years; the countries in the South-East Asia Region, at a consultative meeting on malaria held in New Delhi in April 1976, expressed the view that rural communities in the region had great potential for self-help, that community participation was essential for effective control of malaria and that some countries had shown remarkable success in involving the community in the control and ultimate eradication of malaria.

---

[1] I.e., Mexico, Central America and the Caribbean republics and islands.

[2] WHO Official Records, No. 231, 1976, Part I, Annex 7.

[3] WHO Official Records, No. 231, 1976, p. 18.

[4] WHO Official Records, No. 233, 1976, p. 48.

2.4 The main WHO priorities include the promotion of the strengthening of the health services as part of a global development plan and the integration of antimalaria activities into those of the health services. However, these intentions have sometimes been misinterpreted and led to hurried and poorly planned implementation, consequently resulting in the disruption of antimalaria activities and a sharp rise in malaria endemicity.

2.5 These negative experiences have induced the Philippines, Turkey and some countries of Latin America to adopt a more cautious approach, first trying out integration into the health services on a small scale or in pilot projects before generalization.

2.6 In the rural areas of the African Region the health services' coverage is in general deficient and antimalaria activities are for the time being limited in scope and application; here the objective should be the best possible use of the existing health services for protecting the most vulnerable groups and the stimulation of the development of health services using pragmatic antimalaria services as a catalytic agent. Trials carried out in Nigeria and the United Republic of Tanzania may provide valuable information on this type of approach.

2.7 The limitation of available resources, constraints due to technical problems and, in some cases, concern about environmental contamination, have led some countries and territories to diversify progressively the methods used for malaria control. Thus, in the Central African Republic, Haiti, Malaysia, Morocco, New Hebrides, Nicaragua, Panama, Solomon Islands and Turkey engineering methods of control are being tried or implemented on an increasing scale, while in Afghanistan, Iran and Somalia biological measures such as larvivorous fish are largely utilized.

2.8 Malaria eradication boards existed several years ago in most of the countries with eradication programmes and proved to be excellent means for the coordination of activities and the sharing of responsibilities among those national departments which were directly or indirectly concerned with the epidemiology and control of various diseases. In the recent past, due to the fading interest in malaria control, many boards have been abolished or become inactive.

2.9 In response to the recommendations of the Ad Hoc Committee and the resolutions adopted by the regional committees, as well as the action taken by WHO Regional Directors, national malaria eradication boards are being reactivated in the South-East Asia and Eastern Mediterranean Regions and in the Region of the Americas. In Nigeria a national coordination committee has the overall responsibility for the planning and implementation of the country-wide control programme.

2.10 In order to be fully effective internal coordination must be complemented by improved international coordination. Realizing this important aspect, many countries have reacted very positively to the recommendations made by WHO.

2.11 Thus, coordinated antimalaria activities are carried out by the riverine States of the Senegal, Ruzizi and Mekong rivers. In 1976 eight intercountry malaria coordination meetings took place in the Americas; the responsible officers of the antimalaria programmes of Iraq, Jordan, Lebanon, Syria and Turkey meet regularly once a year. India and Pakistan, and Afghanistan, Iran and Pakistan plan to meet before the end of 1976 and coordinate their plans along the borders. Coordination meetings have been held regularly between countries of the South-East Asia Region and those belonging to the Association of South East Asian Nations.

2.12 International cooperation also extends the assistance affluent countries are providing to the less well endowed. Kuwait and Saudi Arabia are cooperating in strengthening antimalaria activities in Sudan and Yemen and, in collaboration with the League of Arab States and Oman, will support the launching of an integrated antimalaria programme covering almost the entire Arabian Peninsula. Canada, the Netherlands and the United Kingdom of Great Britain and Northern Ireland are actively planning to assist the Sri Lanka programme, which may also receive support from the United States of America. The latter, through its technical

and international cooperative services, is actively engaged in supporting basic and operational malaria research activities and in providing direct financial support to malaria programmes in several countries, including Haiti, Indonesia, Nepal, and Pakistan, while in other parts of the world antimalaria activities are being indirectly supported through assistance in the development of health services.

2.13 Intercountry and international cooperation go in some instances beyond the mere support of antimalaria activities. India, in cooperation with WHO, UNDP and DANIDA, is considering the development of facilities for the yearly production of 500 million tablets of chloroquine to meet the country's requirements. The Socialist Republic of Viet Nam is planning to build a DDT factory to provide for the country's needs; this project is expected to be realized in cooperation with WHO and UNIDO; some countries (e.g. India) may assist in a technical capacity.

2.14 In compliance with its constitutional role, WHO has assisted in promoting international and bilateral assistance. Thus, in cooperation with UNEP, the Organization is promoting the application of bioenvironmental methods of malaria control wherever such measures are feasible. A programme on pest management systems is being developed in cooperation with UNEP and FAO. UNICEF, in coordination with WHO, is strengthening its assistance to antimalaria programmes as part of its endeavour to raise the health standards of children (e.g., support to the Indian programme by providing 30 million tablets of chloroquine).

2.15 UNDP, in spite of serious financial constraints, continues to support activities in, inter alia, Democratic Kampuchea, Lao People's Democratic Republic, Nepal, Papua New Guinea and Solomon Islands.

2.16 Apart from these coordinating activities, the Organization has cooperated actively with most of the malarious countries and territories. It has provided technical collaboration for 75 antimalaria projects, and supplies and equipment for 66 of these.

3. Programme orientation

3.1 It is up to the malarious countries to realize that there are no miracle solutions, and there never will be; whatever international or bilateral assistance they receive, the final prospects of the national antimalaria endeavours will depend solely on the nation's will and determination. The evolution of the situation primarily rests upon their courage to face the problem and to make decisions that sometimes may be severe or even arduous, and upon pragmatic and realistic approaches which must be based on an excellent knowledge of the epidemiological situation and on the adaptation of the strategy to the given situation.

3.2 It is the role of WHO to cooperate with the countries concerned in assessing epidemiological situations and in developing and testing appropriate solutions. However, the diversity of ecological conditions is so great that there are many problems to which the WHO research programme, with the limited resources available, cannot be expected to provide solutions. Moreover, internationally organized and executed research is very expensive. Therefore, epidemiological research must be carried out by the countries themselves as part of the activities of the national malaria projects. The basic steps to be taken towards the promotion of epidemiological research are:

(i) the assessment of the extent and the severity of the disease - in terms of prevalence and incidence, but also in terms of mortality, morbidity, income loss, delays in economic development, etc.;

(ii) the definition of attainable objectives in terms of desired levels of malaria control, namely -

Level 1: mortality reduction

Level 2: morbidity reduction

Level 3: interruption of transmission leading eventually to the elimination of the disease;

(iii) the systematic listing of existing technical problems, i.e. those related to human ecology, vector behaviour (exophily, exophagy), vector reaction to insecticides (irritability, resistance), sensitivity of malaria parasites to drugs, etc.;

(iv) in countries where the interruption of transmission is feasible, the intensity of methods selected and measures applied should be adjusted in accordance with the pattern of transmission;

(v) the anticipation of technical problems related to man, vector or parasite, that might arise in the course of a control programme.

3.3 The development of epidemiological research at country level depends on the realization that research is an essential activity aimed at providing alternative operational approaches whenever a problem arises. This requires, at country level, a nucleus of motivated specialists who are well aware of:

(i) the technical problems which already exist or might occur in the future;

(ii) the information needed to monitor the apparition of problems and to identify and quantify the problem once it has arisen;

(iii) the methodology of epidemiological research in general; this includes the selection of the studies to be undertaken, their planning, implementation and evaluation, including proposals for corrective action.

3.4 The implementation, at country level, of epidemiological research, even when modest in scope and size, requires services which are adequate in terms of personnel, finances and supplies. Obviously when neighbouring countries are in the same epidemiological stratum common problems can be studied on an intercountry basis.

3.5 The World Health Organization could play its role in the promotion of epidemiological research at country level by:

(i) organizing and sponsoring training of research workers;

(ii) coordinating research activities between international and bilateral agencies and countries through seminars, workshops and other suitable means;

(iii) collecting, analysing and disseminating information related to epidemiological research, through documents and publications as well as meetings or conferences (e.g. intercountry meetings, regional committees);

(iv) engaging in technical cooperation with countries whenever requested and feasible.

4. Training

4.1 The swift implementation and development of the malaria eradication programmes required the recruitment of important numbers of malaria workers, who often did not have the appropriate technical background. In respect of training, the specific objectives and the relatively simple standard activities of those programmes favoured the organization of international and national short courses which produced the required number of adequately trained staff. However, neither this type of training nor the experience acquired in time-limited eradication programmes were apt to prepare antimalaria workers to cope with the challenges and constraints of long-term control activities.

4.2 While the specialized personnel is often unable to deal with the many aspects and techniques of a flexible and diversified programme, the same may hold true in respect of general health staff because of their insufficient training and their minimal involvement in the delivery of the antimalaria programme in the past.

4.3 In order to meet the requirements of the malaria control programme it is therefore of paramount importance to revise the training objectives so as to:

(a) stimulate and promote the training of professional staff able to plan, implement and evaluate malaria control programmes;

(b) provide and further develop skills in accordance with specific objectives for the execution of the antimalaria programmes; and

(c) improve the knowledge of existing staff.

4.4 In line with the first goal, WHO is already promoting and supporting the planning and implementation of academic courses in the field of malaria and other parasitic diseases leading to the degree of a Master of Public Health, such as the courses at the School of Public Health, University of Teheran (English), and at the School of Public Health, Mexico City (Spanish). A similar course in a French-speaking African country is in the planning stage.

4.5 However, training as related to the raising of skills and the development of existing junior staff has become the sole responsibility of national training centres which often lack resources and adequate teaching personnel and are therefore not in a position to adapt their programmes to the requirements of malaria control methodology and programmes.

4.6 Five WHO-sponsored international malaria training centres have been closed during the past years because of the unsatisfactory cost/effectiveness and cost/benefit ratios resulting from the relatively small number of trainees and their inappropriate utilization upon return to their countries of origin. However, WHO may assist in coordinating the training activities of the existing national training centres and help them to assume multilateral, regional or interregional activities. WHO could help by providing the centres with teaching aids, manuals and teaching staff and by organizing training courses in modern teaching methodology. It could also cooperate by organizing seminars, workshops and technical meetings on specific subjects and in accordance with priority objectives at national, regional or international levels.

* * *