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MEASURES TO IMPROVE HEALTH SERVICES FOR NOMADS

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INTRODUCTION

In the history of man, the age of settlement is comparatively a recent event, not exceeding six millennium before the Christian era, when man cultivated in the valleys of the Nile, the Tigris, the Euphrates and the rivers of India and China. Nomadism must have developed as a social tribal system in pre-historic times, followed by semi-nomadism, progressing to settlement.

As is well-known, nomadism is characterized by constant seasonal movements in search for pasturages, unlike immigration of groups of people who leave one place to settle permanently in another. This because nomads and semi-nomads depend for their dire existence on migrations which are planned according to their economic and social activities. The camel and horse shepherds are the most mobile nomads, as they travel over a much wider range than the sheep nomads, who shun temptation to cross the desert.

Nomadism strengthens the ties between man and nature, that is to say, human ecology becomes adapted and acclimatized to that of nature. Thus, loyalty of the nomadic bedouin is devoted not to space but to time, hence his adherence to customs, traditions and pride of descent.

This attitude is not peculiar to the Arab bedouins but universally recognized among all nomadic communities. The arid inhospitable environment of the desert shaped the character of nomads to become independent, brave and hospitable, but their interests are limited. True bedouins consider agriculture a lowly profession and settled life a kind of degradation, and they are often in dispute with their neighbours.

The modern state looks upon nomadism as constituting social, economic and political problems of great magnitude, particularly as the expansive desert enabled them to evade government authority and follow their own traditional laws. Thus national governments have, in recent years, made noteworthy efforts to solve this old-time problem, in order to raise the economic and social standards of nomads, and give them the same services in the fields of agriculture, education and health, equal to the other citizens, and enforce upon them the laws of the country to which they belong.

Possibly against his own will, modern life has attracted the nomad to live near villages situated on the fringe of the desert. Industry, particularly the oil industry, and agriculture have attracted him to manual vocations. Motorized vehicular traffic on good roads across the desert has deprived him of the gains he used to procure from the cost of transporting goods by means of camel caravans.

Measures undertaken by governments aiming at improvement of the living and health conditions of nomads are manifold, but in some countries of the region they are more or less concentrated on sedentarization and establishment of basic health units. In others, mobile health units are mainly used as infra-health structure.

Settlement of nomads

This system has great advantages economically and for creating static health services. This can be achieved by establishing well-organized projects in order to encourage sedentarization, mainly by distributing cultivable land among nomads and supplying them with adequate water resources for cultivation. Voluntary settlement can take place naturally by contact, between nomads and farmers. This is a gradual slow process, but it has a

wider scope and can be generalized on a large scale by offering advice and encouraging assistance by the governmental departments concerned with the problem.

Whatever the method adopted might be, it should be based on a well-planned policy aiming at enabling the nomads in the long run to contribute their part to the economic and social development of the country, and reflected in their production, progressive welfare and better health. For success, planning must be based on the following broad lines:

1. Distribution of cultivable land
2. Supply of water sources
3. Social and health services
4. Availability of means of communication
5. International assistance

Iraq

As a result of the enactment of the law on land reform in 1958, the Government of Iraq took possession of large areas of cultivable land and distributed it among nomads. The important settlement areas are the Northern Gezira and Aith and Talaafar in Al Gezira. In the area extending between Sinjar and Hadar and Talaafar, there are more settlement villages scattered over the area. There are other centres for sedentarization of nomads: Al Rottbah, Al Wadian and Fiadat, where wells and fertile soil are available. At present, there is a project under planning in the governorate of Al Anbar. The tentative estimation of the cost is 1.25 million Dinars. This will include building of villages lighted by electricity, and provided with health units, primary schools, sanitary markets and radiotelephones.

According to the 1962 census the nomads in Iraq amounted to 250,000. Distribution of land to them started in Iraq since 1931, but it remained slow and ineffective until the law on land reform was enacted in 1958, when marked progress was attained. It has been calculated by Dr. Barazi that 12,098 nomads in Iraq have become settled farmers since 1958. Possibly this is a low estimate because at present the Government is very active in organizing land reform.

Basic education and health education are both very essential for the promotion of health, particularly if bedouins can be persuaded to educate their girls. Education was limited to learning only how to read for the sons of Sheikhs, but nowadays primary education is gaining popularity among semi-nomadic tribes in Iraq. Even girls go to bedouins' schools in a few instances. Moreover, static health centres, mobile units and first aid posts are needed for nomadic and semi-nomadic tribes. Wireless telephones are already present in the tribal police posts, which are scattered in the desert, for the purpose of communicating to the authorities news and itineraries of the nomads.

Egypt

Sedentarization of nomads and semi-nomads has been accomplished in Egypt by the Alexandria/Marsa Matrouh project by giving the bedouins facilities (land, water and seeds) to obtain their food through stable cultivation of barley, nurseries of fruit trees (especially olives and almonds), and pastures and fodder for their flocks. The Government has also provided them with housing and assistance through the services of co-operative societies. It is planned also to establish vocational training to prepare them for employment in agriculture and industry, build primary schools, health units in addition to

the ones available, and furnish them with recreation facilties and means of communications.

Land reclamation and distribution among bedouins, and provision of new adequate water sources as well as improvement of live-stock breeds are among the main objectives of the Desert Development Authority in Egypt.

The area intended for reclamation amounts to 20,000 acres, calculated by giving five acres to each family of five persons. It is hoped that the entire nomadic and semi-nomadic population of Egypt will be settled more or less on this basis.

The World Food Programme provided appreciable assistance to the project by supplying annually 27,000 tons of food concentrate and 45,000 tons of roughages. This was calculated to represent the requirements of half a million heads of sheep for a period of threemonths,which is the average drought period when feeding is necessary.

Sudan

Settlement of nomads in the Sudan started during the 16th Century when the pasturing tribes formed political alliance between themselves and established the Kingdom of Fung in Sennar on the Blue Nile. Settling increased as a result of the construction of Sennar Dam in 1925, Gebel El Awlia, 1938, and the project of Delta El Kash in the eastern part of Sudan. Cultivation of cotton in the Nuba mountains (1925) attracted nomads to settle down. The recent projects which were started in 1954 are:

1. El Manakel (1957), comprising 800,000 acres on the Blue Nile.

2. Khashm El Girba, situated on Atbara River and comprising 500,000 acres, where housing and cultivable land were provided for 50,000 Sudanese Nubians moved from old Wadi Halfa, which was flooded afterwards by the Great Lake

of the Nile. The World Food Programme undertook to feed this immigrant population until they harvested their first crops. These are only examples of what is going on in the Sudan, but the problem is still of great magnitude.

Libya

Two important factors enable the national Government to achieve marked advances in the bedouins' settlement. The discovery of petrol offered good opportunities of work for the bedouins and the economic prosperity enabled the Government to distribute 4,600 estates, formerly owned by the Italians, among the bedouins.

Jordan

Co-operation between the Government of Jordan and the World Food Programme is resulting in building-up the experimental project of "Jafar", where labourers are employed from among the bedouins.

Saudi Arabia

Reclamation of cultivable land in two projects in Saudi Arabia is undertaken in order to sedentarize the bedouins. In one of them, the Wadi El Sahbaa project, it is intended to distribute 20,000 acres among 2000 families.

PRIORITIES AND PLANNING

The brief outline of some of the projects undertaken by countries of the Region has been purposely listed in order to draw attention to the importance given by governments to settlement as a radical solution to all aspects of the problem of nomadism. Undoubtedly sedentarization projects should merit first priority wherever it is feasible. Raising of the standard of health cannot be achieved as satisfactorily as it should be unless the community is stabilized in a fixed place, so that health measures can be applied with success. One must not, however, lose sight of the fact that settlement is gained slowly,

whether guided or voluntary; and moreover it is a costly process, requiring careful planning and skilful execution. Therefore, other temporary plans should be drawn up in order to meet the present urgent situation which varies according to the area, customs and type of nomad (camel, horse or sheep nomad). It must be borne in mind that successful planning, particularly for nomads, cannot be done without conducting systematic surveys and collecting reliable data concerning ecology, itineraries, culture, customs and diseases prevalent among them. Some published reports state that tuberculosis is common among nomads, while in Egypt others confine this prevalence to certain localities such as the Siwa Oasis. Little is known about venereal diseases because nomad women refuse to be examined. There are several examples of contradictory statements which make it very necessary to conduct well-organized surveys on nomads in each country.

The control of malaria, smallpox and other infectious diseases (including tuberculosis) is of great importance. Cholera, being a nomadic disease, is very difficult to control among nomads. Malaria, cholera, typhus, kala azar and yellow fever have been spread across international frontiers by nomads.

Health infrastructure

The health services already established or under planning consist of:

1) Static service, 2) mobile service.

An example of the static units is found in the above-mentioned sedentarization project operating in the sector of Alexandria/Marsa Matrouh in Egypt. Health units are established in several small towns along the coast of the Mediterranean Sea in the neighbourhood of which the semi-nomad bedouins have temporary habitations.

Each of these units is staffed by a physician, two nurse-midwives and an assistant sanitarian, who deal with curative and preventive medicine and registration of vital statistics and school health.

The building of the unit contains a medical examination room, a dispensary and a mother and child welfare room. The laboratory is equipped with microscopes and utensils for examination of urine and stools. Home visiting and family health surveys are included in the plan of the unit. There is also the physician's residential quarters comfortably provided for in the unit. Furthermore, there are seven hospitals in the coastal area and in Siwa Oasis. There are also health inspectors charged with the responsibilities of registering births and deaths, notifications of communicable diseases and vaccinations against smallpox.

The population of the coastal sector, including Siwa, Bahria and Farfara Oases, amounts to 114,000. The problem of nomadism, although a challenging one, yet seems to be amenable to control.

MINIMAL HEALTH CARE

It must be emphasized once more that settlement of nomads should be the ultimate goal to be attained for the solution of the problem of nomadism from all its aspects. Wherever there is land to be reclaimed and cultivated, projects for sedentarization furnished with social and health services should be firmly established. The problem in Somalia does not seem amenable to sedentarization in the near future because of the scarcity of water resources. In such projects, community health centres in countries at an intermediate level of economic development are staffed by at least one physician aided by nurses and health personnel described in the previous pages. In the poorest

developing countries, most health centres are served both for treatment and prevention by auxiliary health workers. According to Roemer (1972)" in countries at all economic levels there is a general trend towards primary health centres with broader functions where the patient has direct and convenient access to ambulatory services for both the prevention and the treatment of illness. Thus, an integrated primary health centre may be said to provide the following basic services:

1. personal preventive services, such as periodic health examinations, mass screening and individual health counselling;
2. initial treatment (first aid) of major or complex illnesses, with referral of patients for definitive care to larger polyclinics at hospitals;
3. initial as well as definitive treatment of minor illnesses;
4. home visiting for either health promotion or bedside medical care;
5. extramural preventive services through health education and the improvement of environmental sanitation."

This system can also be applied to nomads by placing such primary health centres in a rural area near which nomads camp during a certain time of the year. This can be determined after studying the itineraries of the movements of nomads in the various areas of each country. However, the health care among nomads will be more or less restricted as a result of their movements, and, as a consequence, will be limited to a minimum level. At present the bedouins will carry their sick over long distances to the nearest hospital. Radiotelephones may prove very useful if available. In order to improve present conditions, it has been generally recommended that mobile units consisting of medical auxiliaries should accompany or visit periodically the nomads during their movements.

Also, there should be established first aid posts in the police or tribal guard stations, which are usually well distributed in the desert. These stations are usually furnished with radiotelephones. The minimum requirement of staff for a mobile unit should not be less than one medical assistant and one sanitarian, or at least a trained assistant sanitarian. In proportion to the size of nomadism in a country, there should be an adequate number of mobile units and staff. In the headquarters there should be of course a public health administration office, headed by a medical doctor assisted by health officers and administrative staff, in order to direct the network of the mobile units. If it is at all possible, the personnel of these mobile units or some of them should be with advantage selected from among the literate nomads of the same clan and given adequate training, particularly in malaria prevention, immunization and first aid. It is strongly felt that surveillance for malaria among nomads should begin in the first year of the attack phase. For this, one or two nomads should be appointed by the National Malaria Eradication Service (NMES) for carrying out antimalaria measures. This nomad representative of the NMES must be made responsible for inspecting and supervising the spraying operations of the tents and shelters and must keep the NMES aware of the itinerary of the movements of the tribe and keep a register for fever cases, take blood films from them and distribute drugs accordingly. The Expert Committee on malaria in its seventh report (1959 A) recommended the establishment of a special section in the NMES to deal with the problem of migrants, experienced in tribal affairs. This is a valuable recommendation because application of antimalaria measures under certain situations meets with great difficulties and would require expert advice. In Somalia, for example, with an estimated population of 5,000,000, only one third of this number are settled communities, while the rest are nomads living

by animal husbandry. The nomads have to wander throughout the year in search of fodder and water to support a livestock population estimated at about 19 million heads of stock. Insecticide spraying is difficult under conditions prevailing in Somalia. The woven mats which form the walls may be turned the other way out when the hut is next erected, and thus have the sprayed side on the outside of the hut. According to Visser, the malaria control measure so far applied is the distribution of chloroquine throughout the country by mobile teams and by dispensaries. Presumptive treatment is given and slides are collected from cases (Visser).

With regard to Iran, Haraldson (1972) states that inno other place have mobile units,for health services and education, been so well organized and survived for such a long time. Police is stationed in each camp, a radio-telephone and a jeep for transport are available at distances between three and twenty kms. The hospital in Shiraz, 100 km, could be reached in five to six hours. All roads are rough. Some camps are paid weekly visits by the health camps' mobile units.

SPECIAL GOVERNMENT BODY FOR NOMAD PROBLEMS

There seems to be a general agreement that a government body for nomad problems should exist in each country having nomads among its population. The establishment of such a body or board is already being contemplated by certain governments of the Region. As a matter of course, Ministries of agriculture, economics, planning, education, social affairs, health and interior should be represented in a board created for nomadic affairs. There should also be a special department for nomadic affairs which would be responsible for the necessary services to be rendered to them. There is a great need for: (1) model farms for training nomads in agriculture, (2) mobile health units for curative

and preventive care, (3) health education, (4) schools and (5) veterinary units to prevent epidemics among their livestock. Provision of these services will help this energetic sector of the population to become adapted to settlement and contribute towards the economy and welfare of its country.

Pastural medicine

The intricacy of the problem leads us to think that the establishment of a specialised section to deal with pastural medicine is necessary if we want to raise the standard of health of the nomads. Its functions may tentatively be summarized as follows·

1. to conduct surveys of diseases prevalent among nomads;
2. to study the itineraries of migration of tribes;
3. to investigate the nomads' potentialities in conveying epidemics and to protect them and the settled population;
4. to combat malaria, smallpox, cholera, tuberculosis, kala-azar, typhus, yellow fever and other epidemic diseases,
5. to establish efficient quarantine stations, or transit camps (such as is the case of the large groups of Westerners who migrate from West African countries through the Sudan), to prevent introduction by them of epidemic diseases across the frontiers;
6. to establish an infrastructure health service independent of or integrated with the rural health service and referral hospitals;
7. to co-ordinate its work with that of the "national board for nomadic affairs", if such a board is in existence in the country concerned.

Personnel

It is advisable that there should be primary static health centres operated by medical doctors and assistants, situated in places within reach of nomads

at some time or another. The training of the medical doctor should, as far as possible, include two years of post-graduate work in hospitals and public health departments. Auxiliary personnel, apart from nursing staff, is trained differently in different countries. In some, there are special schools for training medical assistants, public health officers and sanitarians, while assistant sanitarians and dressers or male nurses receive in-service training. In some other countries, like Egypt, no other category than the medical doctor is allowed to treat patients and, therefore, the special training is provided only for sanitarians and laboratory assistants. Although it may be advisable to employ multi-purpose workers to serve in the mobile units for nomads, yet the choice may be left to suit the local conditions. It is strongly recommended, however, that these auxiliaries should be selected from among the literate nomads and given special training. However, to attract health personnel to the nomads' health service, additional remuneration should be offered, as well as a place to live in, certain amenities, and higher scale pensions regulated for them for the period they spend in the nomadic service. Organization-wise, the nomadic health service should be an integral part of the national health service, particularly in the case of eradication or control of malaria, prevention and control of epidemic diseases, tuberculosis, trachoma and endemic diseases.

The role of United Nations Specialized Agencies

Considerable attention has been given by ILO, UNESCO, FAO, WFP and WHO to the problem of nomads. As the main theme before us is health, we have to discuss the role of WHO in this field. No doubt, valuable contributions have been made by WHO, particularly in respect of malaria eradication in relation to nomads. WHO is requested now to guide countries in planning and projecting

for raising the standard of health among nomads. This planning may, with advantage, be preceded by a pilot project to be assisted by WHO and other international agencies concerned with the problem.

Tentatively the main objectives of such a pilot project would be:

1. Comprehensive survey of the health problems of nomads;
2. on the basis of this pre-action survey, an infra-health structure is organized to deal with the problem;
3. evaluation of results and recommendations.

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