

Food and nutrition policy development

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It has been estimated that over 700 million people still do not have enough food to eat on a daily basis and that more than 2 billion are subsisting on diets that lack the essential vitamins and minerals required for normal growth and development and to prevent premature death and disabilities such as blindness and mental retardation. At the same time, millions more suffer from chronic diseases caused by excessive and unbalanced diets. At the International Conference on Nutrition (ICN), held in Rome in 1992 and sponsored by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) of the United Nations system, 159 nations endorsed a World Declaration that included recognition of the need for national plans of action for nutrition/national food and nutrition policies. Specific objectives that the delegates agreed should be achieved were a reinforcement of earlier goals agreed to at the World Summit for Children 1990. Political will is an essential prerequisite for successful national food and nutrition policies and plans. These must also be realistic, well-conceived and effective at all levels, especially where devolution is taking place. Over the last two decades there has been an evolution in the issues that policies address, as well as changes in the expectations of them. Virtually all countries have agreed to 'establish appropriate national mechanisms to prioritize, develop, implement and monitor policies and plans to improve nutrition within designated time-frames, based on national and local needs, and to provide appropriate funds for their functioning'. Worldwide, over 120 member states of the United Nations (UN) have finalized, strengthened or have under way, national plans of action for nutrition. The policy decisions being made in order to implement more of these plans over the remainder of the decade and beyond, are already providing invaluable experience and data. Evaluation should provide even more in the future.

Key words: policy, food and nutrition policy, International Conference on Nutrition, national plans of action for nutrition.

Introduction

At the International Conference on Nutrition (ICN), held in Rome in December 1992 and sponsored by the United Nations Food and Agriculture Organization (FAO) and the World Health Organization (WHO), 159 nations endorsed a World Declaration and a global Plan of Action for Nutrition. The Plan of Action outlined the current situation in the world: 'over 700 million people still not having enough food, more than 2 billion subsisting on diets that lack the essential vitamins and minerals required for normal growth and development and to prevent premature death and disabilities such as blindness and mental retardation, while at the same time millions suffer from chronic diseases caused by excessive and unbalanced diets'.¹ The declaration went on to assert that the eradication of hunger and malnutrition is within the reach of humankind. However, political will, well-conceived policies and concerted actions at both national and international levels will be essential to achieving this. They will need to be coherent and effective at local, national and international levels.

As resources, needs and problems vary between and within countries, each national situation will have somewhat different priorities, as national policies and plans of action are formulated in order to achieve stated national objectives. The four overall objectives agreed upon at the Conference

were: (i) to ensure continued access by all people to sufficient supplies of safe foods for a nutritionally adequate diet; (ii) to achieve and maintain health and nutritional well-being of all people; (iii) to achieve developmental goals that are sustainable, environmentally sound and contribute to improved nutrition and health; and (iv) to eliminate famines and famine deaths. Taking these into account it was agreed that 'all governments should establish appropriate national mechanisms to prioritize, develop, implement and monitor policies and plans to improve nutrition within designated time-frames, based on national and local needs, and provide appropriate funds for their functioning'.¹ Specific objectives were also endorsed and reinforced earlier goals agreed to at the World Summit for Children.²

This paper will begin by looking briefly at past experiences before going on to identify some existing nutritional problems. It will then look at what is being done now and at

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what might be done in the future, with particular reference to the development of national food and nutrition policies.

Past experiences

Earlier national food and nutrition policies which embraced a wide multisectoral involvement and broad representation on an integrated national committee have in most cases not really stood the test of time. One exception to this generalization is that of Norway's, an early successful, integrated model.³ Norway's policy on food and nutrition is also one of the few that has been evaluated. Although it can claim definite success in many areas, it has also helped highlight some of the problems. It was predominantly in the developing countries that the very integrated and complex national nutritional policies were tried (e.g. in Colombia), where the underlying assumption was often that because malnutrition has multiple causes, integrated interventions would be necessary.⁴ In the most ambitious examples, it has been observed that 'advocating action on wide-ranging intersectoral decisions as a prerequisite can cause paralysis, or at least frustration'.⁴

The Pacific, Fiji, Papua New Guinea and the Kingdom of Tonga all have had national policies on food and nutrition for a long time but with only limited success in implementation. In general, a lack of trained, national personnel as well as management problems and a perception of a low priority by government, appear to have been largely responsible for this relative lack of success.⁵ In Fiji, the National Food and Nutrition Committee has remained active and continued many public nutrition activities and some limited home gardening activities. It has been less successful in such areas as getting government approval of legislation to adopt the International Code on the Appropriate Marketing of Breast-milk Substitutes, although the legislation has been drafted for over 10 years now.

Recent evaluations by Indonesia and Thailand attributed their success in reducing both protein-energy malnutrition and micronutrient deficiencies to the fact that both were addressed through poverty alleviation programmes, to a greater or lesser degree, rather than through focussing purely on nutrition.⁶ As these evaluations noted, one of the underlying problems has been the fact that improving nutrition is often not a high priority of governments. Another problem is that nutrition issues are frequently placed under health ministries, which are often relatively less powerful governmental departments. Thailand's experience has shown that nutrition should not be seen as only a health sector concern, and that it needs to be set apart as a separate entity in national development. Otherwise it risks 'falling through the cracks' and receiving limited attention and resources compared with other, more urgently perceived health plans.⁶

If not administratively placed under the health sector, then nutrition has usually been placed under agriculture ministries. However, the interests and priorities of the agriculture sector have often not been in alignment with those of health issues *vis-à-vis* production. In fact, they have sometimes even been in conflict. There are signs that this is changing, though, as it is realized that the two major causes of disability and death (namely, the infectious diseases and the non-communicable diseases) are linked intrinsically to agricultural products and processes.⁷

In theory, the best place for nutrition policy appears to have been under something akin to a National Planning Office. Although policy there has the most chance of being truly multisectoral, a clear identification of responsibility has often been lacking. As a result, actual implementation has been a problem, causing policymakers to lose interest. Another problem has been that nutrition has not been seen to be a revenue earner but, in fact, quite the contrary. Hence it has been a low priority in development compared to say, infrastructure building or cash crops, although this perception is also changing. The agricultural sector has increasingly accepted that an increase in food production can not be the only and definitive solution for nutritional problems. Agricultural and horticultural strategies are now generally beginning to incorporate health and nutrition considerations into their planning, as well as concepts of sustainable development and ecology, in the realization that limits are being reached in the expansion of production.⁸

In many countries of Asia and the Pacific, and elsewhere, multisectoral National Nutrition Committees were set up and given responsibilities and powers that related mainly to collecting data and to public health nutrition education.⁹ The promotion of nutrition and health information through health education and promotion methods has generally been the more successful role, although rarely evaluated. For the other main task of collecting data, these committees or commissions often lacked the authority or human resources to collect or receive data on a regular basis, and have also had inadequate resources to process the data. Often enough, resources enabling action to be taken based on the results were also not available.

For example, although in the Philippines the national agency was a relatively powerful body, the National Nutrition Council, the implementors of the programmes had in the past been local health workers operating under the Department of Health which had not, except in theory, been fully integrated into the National Nutrition Council decision-making process. With the advent of devolution (decentralization), it will be interesting to see if this is more successfully integrated at the local government level. Presently, the Philippines is an excellent example of the development of a national plan of action for nutrition, which incorporates the implementation of a more vertical micronutrient initiative.

In Bangladesh, the National Nutrition Council had little power and no resources, relying almost solely on the push of one prominent nutritionist. The body that was seen by the government as the implementing agency, the Institute of Public Health Nutrition, also had little power, little prestige and had to spend much of its time trying to implement the vitamin A capsule distribution programme, using health workers not under their authority who saw the task as just extra work.

In countries like Australia and New Zealand the conflict has been more between health and nutrition policymakers and powerful lobbies in the food industry and in farm production lobbies, especially the dairy industry. This dysjunction has now moved on to a large extent. While the issue of food security is usually not explicitly addressed in such countries' policies (as their plans focus mainly on food safety, dietary habits and health-related aspects of nutrition), adoption of environmentally sustainable agricultural practices in

an increasingly competitive international trade environment is now an important focus.¹⁰

From experience in four African countries, Kenya, Mali, Rwanda and Zambia, Tuinenberg¹¹ concluded that the coordination of food strategy should be vested in a lead ministry as close as possible to presidential or cabinet level. This was partly because coordination had been difficult to achieve as different ministries tended to interpret food strategy objectives differently. Political sensitivities and wider repercussions of policies such as liberalizing the market should not be underestimated.¹¹

The nutritional problems

In global terms the nutritional problems most pressing are still undernutrition, as in protein–energy malnutrition and micronutrient deficiencies, the related problem of food security and the more recent emergence of the nutritionally related non-communicable diseases.

It is currently estimated that more than 200 million, or more than one-third of all children aged under 5 years, are underweight due to malnutrition.¹² The proportion of malnourished children in developing countries has on average declined, although not in all countries. In South Asia and sub-Saharan Africa, the actual number of undernourished children has increased as available food supplies have decreased.^{13,14} Conversely, if present trends continue it seems likely that countries in the Middle East, North Africa and Latin America will reach prevalences more typical of the industrialized nations by the end of the century.¹³ In some countries population increases have meant that the proportion of undernourished children has decreased even though the actual numbers have not. In many countries in South-East Asia and in China, however, there has been a decline both in proportions and actual numbers. This improvement, while multifactorial, is thought to be predominantly due to the socio-economic progress that has occurred in much of South-East and East Asia in the last decades.

At the same time, micronutrient malnutrition continues to affect over 2000 million people worldwide.¹² Iodine deficiency disorders, the greatest worldwide cause of preventable brain damage and intellectual impairment, are a significant public health problem in 118 countries.^{12,15} Approximately 250 million children have deficient vitamin A body stores and therefore have on average a 20 times greater risk of dying from severe infections.¹⁶ Both of these deficiency syndromes are showing encouraging declines in some regions, but not in all countries. Iron deficiency makes maternal and infant mortality more likely and leads to limited learning capacity, impaired immune function and reduced working and productive capacity in those affected. Approximately 2 billion people in developing and developed countries have iron deficiency, half of them showing signs and symptoms of iron deficiency anaemia.¹²

Nutrition plays a vital role in the multifactorial causation of non-communicable diseases, including obesity, as well as in their prevention and management. In virtually all countries there has been an increase in life expectancy and hence, larger proportions of the population moving into the age range in which chronic degenerative diseases become the major causes of ill-health and death. At the same time, there has been a transition to the non-communicable type of dis-

eases due to lifestyle changes which result in increasing saturated fat and energy in the diet and a higher prevalence of other risk factors for the chronic degenerative diseases.^{17,18} Cardiovascular disease is the leading cause of morbidity and premature death in most countries now, it being followed in the developed countries by cancer.¹² Diabetes is part of the global epidemic.

Reasons for change in policy development

The favourable progress on protein–energy malnutrition referred to above has not been universal or consistent. Over the last decade it has become customary to state that there is not so much a problem of food shortages in the world, as these are problems in distribution: locally, nationally and also internationally. It is likely that this has indeed been the case, although recognizing this has not led to a more equitable distribution. In fact there is considerable evidence to show that inequalities are increasing.¹⁴ Furthermore, there is now a real possibility of limits being reached in the continuing expansion of food supplies,⁸ such that it may no longer be true to say that the problems of food shortages are those of maldistribution.

Many developing countries are saddled with considerable debt burdens and the servicing of these, along with structural readjustments, have led to a slowing down of what positive trends there were in some countries during the late 1970s and early 1980s. There are some encouraging signs of this slowdown being reversed, or at least that it was lessened in the early 1990s, although sub-Saharan Africa and South Asia remain of concern.¹³ Nevertheless, most countries are showing encouraging signs, especially in the micronutrient deficiencies.

More pragmatic factors have also led to a change in the focus of food and nutrition policies. The aim of earlier comprehensive policies was the reduction of protein–energy malnutrition. The multisectoral programmes did not appear to have made much impact on protein–energy malnutrition, or perhaps their impact was too difficult to evaluate properly as so many factors were involved. It may also be that they had not been given adequate time or resources to show an impact.

Probably due to the relative failure of such programmes, the alleviation of micronutrient deficiencies (in particular of iodine, iron and vitamin A) have become recent priorities. These deficiency diseases all have the apparent advantage that a simple supplement can have an effect while the more difficult social, public health and horticultural changes are being developed. In some cases, however, the supposedly complementary medium and longer term activities get forgotten and the ‘emergency’ distribution of capsules is protracted for many years (e.g., over 20 years in the case of Bangladesh).

The other advantage of tackling the micronutrients is that there are examples where elimination of the deficiency has been shown to work, particularly so in the case of iodine.¹⁹ Earlier in this century the USA, Australia and New Zealand successfully introduced the fortification of salt with iodine,¹⁹ an apparently simple technique that could theoretically be introduced to countries with perhaps limited infrastructural capacity, as is being done in India and China.

Vitamin A has also acquired many new and influential supporters for its apparent role in reducing childhood mortal-

ity with a 6-monthly capsule, an appropriate vehicle for cost-effective interventions,²⁰ particularly those requiring evaluation at the end of a 3- or 5-year-funding period. This high-technology, short-term approach has some strong critics in the developing world who point out that in the long run, better child nutrition, health and survival can only be achieved by action on a broad front directed at the removal of the several socio-economic, environmental and dietary constraints which afflict the poor.²¹

In addition to all the above, the prevalence of the nutritionally related non-communicable diseases continues to increase, posing another considerable threat to many nations. A number of these nations will face the burden of tackling the management of these chronic diseases while still having to maintain programmes to tackle undernutrition. In some of the newly independent countries in Eastern Europe, life expectancy is not improving any further as a consequence of increasing adult mortality due to the non-communicable diseases.¹² There is now enough international evidence that health promotion and health education can help to reduce the prevalence of, at least, cardiovascular and cerebrovascular diseases (e.g. in Australia, Japan, New Zealand, Singapore and the USA among others), where a decline has taken place since the mid-1960s. The magnitude of the decline has not been adequately explained, although it certainly has something to do with decreasing smoking rates in adults and national changes in diets.

On the other hand many countries, particularly in Asia, are in transition, both epidemiologically and demographically, and so need to shift their policy priorities. China provides a current example of such a transition, with some of the welcome and less welcome aspects of this. As the diets have become more Westernized (including increased consumption of foods of animal origin), fat intake has risen from 26% in 1981 to 30% in 1988.²² While height and longevity have increased dramatically in the last 45 years, obesity, mainly in urban areas, now affects 10% of women and 5% of men, and disease patterns are changing.²² Before 1950, the first three causes of death were measles, tuberculosis and senility, whereas in 1985 they were malignancies, cerebrovascular disease and ischaemic heart disease.²³ The prevalence of diabetes has risen every year by 0.1% from 0.67% in 1980.²⁴

Policy development

A food and nutrition policy continues to be important in addressing the above-mentioned nutritional problems, but the character of policy development has changed. Changes in the concept and importance of nutrition as related to other sectors of society have contributed to this. The increased attention of the development banks to health and human resources development, as well as nutrition, has already proven important, both in terms of increased resources and implied priority.²⁰ Nutrition as a means, measure and outcome of development is being recognized increasingly. The economic quantification of diseases and deficiencies (e.g. as measured by DALYs (disability adjusted life years)), and the calculation of a cost-benefit in tackling such deficiencies, will be important in those adjudged as economic interventions (e.g. iron deficiency in reproductive age women and vitamin A in children), but counterproductive in those requiring a more complex set of adjustments, such as protein-energy malnu-

trition. This may cause a move towards more vertical interventions as international funds are chased. It may also contribute to a movement away from targeting disadvantaged groups, a key concept in most national food and nutrition policies.

This cost-effectiveness approach, currently in the ascendency, suggests that countries that have targeted economic growth first and then poverty alleviation, such as the Republic of Korea, Indonesia, Malaysia, Singapore and Thailand, may represent a suitable model. However, if the most vulnerable sectors of society are not protected at this stage, their health and nutritional status is likely to suffer further, as happened in the early days of the economic structural adjustment policies of the World Bank.²⁵ There is also adequate information to recommend targeted approaches, which can be successful even in the face of continued lack of economic growth, as in the often quoted examples of Cuba, Kerala in India and Sri Lanka.

These two approaches, described as 'growth' and 'support' approaches,⁴ need not be exclusive. There is now considerable consensus on this. A review by the UN Subcommittee on Nutrition⁴ points out that the 1990 World Bank Development report, the United Nations Development Program (UNDP) in its 1990 Human Development report, and Dreze and Sen²⁶ all agree on an approach which includes: (i) economic growth that deliberately involves participation of the poor as the long-term solution to poverty; and (ii) in the interim, and without needing to retard growth, social security support for the poor, with access to adequate food and health.

For acceptance by those allocating resources, nutrition objectives should not interfere with overall development. As mentioned above, nutrition concerns may be of priority in one sector, but action is required by others. This means resources will probably need to be allocated between sectors and to different activities within sectors. For these reasons, effective use of information and advocacy are needed by those promoting nutritional aims. The Thailand experience supports this view given that the first two of their nine steps for successful food and nutrition policy are 'advocating nutrition promotion' and 'building a critical mass and public awareness'.⁶

Early attempts at quantifying the importance of adequate nutritional status of national populations in the development of economies has been done for iodine deficiency disorders (Pandav, pers. comm. 1995) and is well recognized in the decreased productivity resulting from iron deficiency anaemia.²⁷ There are ongoing attempts to quantify costs and economic benefits of breast-feeding. Sanghvi and others have looked at the relative cost-effectiveness of different interventions at a national level, to enable more objective and perhaps rational choices to be made about the mix of activities and interventions chosen in a country to address nutrition and health problems (Sanghvi, pers. comm. 1998). Less well quantified is the impact of early protein-energy malnutrition on the mental development, learning and attention span of pre-school and school-age children, but it is clear that there is an identifiable effect.²⁸ Some important recent work has confirmed that nutrition interventions not only can have a positive effect, but also that the positive effect of an early intervention may actually increase over time.²⁹

As shown above, pragmatic concerns and funding agencies' priorities are as much as anything else the driving forces at present. Clearly these may not necessarily coincide with a particular country's priorities. Many countries are in the process of establishing their own nutritional plans, following the FAO/WHO International Conference on Nutrition and the World Summit for Children. Fortunately, those two summits also contributed to consensus among international agencies and non-governmental organizations regarding nutritional goals.

At least 160 countries have committed themselves to formulating a national food and nutrition policy, a national plan of action for nutrition or a nutrition strategy as part of a broader national plan.¹² Worldwide, over 120 member states of the UN have finalized, strengthened or have under way, national plans of action for nutrition.¹⁰

As can be seen from Table 1, almost half of all countries (46%) have finalized or have a draft prepared of a National Plan of Action for Nutrition, with a further 25% of countries having one under preparation. Lack of human resources and political instability were reported by countries as the two main obstacles to developing a national plan.¹² Indicators have been developed for the nine goals identified in the global plan and are being used by countries as appropriate (Table 2).

Table 1. Developing and implementing National Plans of Action for Nutrition/National Food and Nutrition Policies

Status of National Plans and Policies	No. countries (and territories)	Percentage (%)
Finalized or draft prepared	87	46
Under preparation	49	25
Not yet started/No information	55	29
Total	191	100

WHO 1995

Table 2. Monitoring International Conference on Nutrition goals

Goals	Main indicator
Famine and famine-related deaths	Famine-related deaths/1000/year
Starvation and nutritional deficiency diseases in communities affected by natural and man-made disasters	Preschool children (under 5 years of age), of the population affected by disasters, below -3 SD (weight-for-age)
Iodine and vitamin A deficiencies	Children (6-11 years) with goitre of any grade Preschool children (2-6 years) night-blind
Starvation and widespread chronic hunger	Populations which, over one year, do not have access to enough food to meet their energy needs
Undernutrition, especially among children, women and the aged	Preschool children (under 5 years of age) below -2SD (weight-for-age)
Other important micronutrient deficiencies, including iron	Women (15-49 years) with Hb levels below 12 g/dL (non-pregnant) and below 11 g/dL (pregnant)
Diet-related communicable and non-communicable diseases	Rate (cases/100 000/year) food-borne diseases. Age-standardized death rate/100 000/year from coronary heart diseases
Social and other impediments to optimal breast-feeding	Infants less than 4 months (120 days) of age who are exclusively breast-fed
Inadequate sanitation and poor hygiene, including unsafe drinking water	Population with access to an adequate amount of safe drinking water in a dwelling or located within a convenient distance from the user's dwelling

WHO 1995.

In a number of countries (Dominican Republic, Kenya, Philippines, Vietnam, Zaire), national plans of action for nutrition are being adopted by the highest Government authorities and have become truly national plans. In other countries, plans are being adopted by one or several line ministries without referral to higher political levels. Indonesia, for example, has made a conscious decision not to develop a national plan, but is addressing nutrition problems through other national development planning mechanisms. In many industrialized countries (France, Ireland and Singapore), nutrition is being addressed through existing health plans. In these countries, national plans may still be necessary to address problems of ethnic minorities or to target other vulnerable groups, as has been the choice for Australia and New Zealand.^{10,30}

Many countries, in addition to preparing national plans of action for nutrition, are using other mechanisms such as using existing national food and nutrition policies (Chile, Mexico, Samoa, Solomon Islands, Uganda); 5-year development plans (Cambodia, Indonesia, Iran, Pakistan); national programmes of action for children (China, Lesotho, Namibia); or a national hunger campaign (Brazil).¹⁰

However, despite the wide array of planning processes employed in developing countries, the impact of existing programmes is often curtailed by lack of local capacity, resources and coordination.¹⁰ Countries report that insufficient awareness and understanding of nutrition problems among policymakers and planners is resulting in inadequate resource allocations to food and nutrition programmes, and in a neglect of strengthening local capacity and intersectoral coordination.^{10,12}

Future directions

Clearly a range of different approaches are becoming necessary and the above examples are encouraging signs that this is being recognized and addressed. In the last few years, international summits have resulted in increased attention

being put on nutrition policies. The definition of what constitutes a national food and nutrition policy is continuously evolving. If this is so, what are the alternatives?

It has been suggested that 'it is often possible to decide on a single or a few useful, if not optimum interventions' and that limiting the scope of activities is a practical necessity.⁴ Nevertheless, a planned, integrated view of the whole food and health system and how it relates to other sectors is still essential, particularly if the interventions are to become institutionalized. A consistent theme in evaluations of national food and nutrition policies has been that 'decisions and actions are more important than statements', and so responsible planning would work by identifying the best feasible approach at any one time, with an eye to future needs.⁴ Whereas a broadly based, integrated policy to supply, distribution and consumption is necessary if all people are to be assured of adequate access to food, it is in the implementation of policy that simplicity and clear responsibility for actual activities need to be the guiding principles.³¹ Not everything can be done at the same time.⁴

Many countries have indicated that existing coordinating bodies for integrating nutrition into development plans and programmes frequently lack adequate capacity and resources.¹⁰ A proliferation of ad hoc bodies and committees to enhance intersectoral cooperation and coordination is reported to have led to dispersion of already scarce resources and capacity.¹⁰

In all the successful examples of policy, a continuous evolution of policy and forms of resource allocation and implementation has been an essential component.^{4,6} Food and nutrition policies need to be fluid and continuously evolving. Hence some form of ongoing evaluation and assessment, and the possibility of responding to the results of these assessments, must exist.

It is likely national policies and plans will show: (i) a move away from large, complex intersectoral plans; (ii) a move to nutrition education/health promotion activities and perhaps away from economic manipulation, although supporting legislation will remain important; (iii) a different sort of limited integration (e.g. vitamin A supplementation with the expanded programme of immunization); and (iv) more involvement of the private sector. The extent to which the General Agreements on Tariffs and Trade (GATT) succeeds in liberalizing international trade will have an on-going impact on food and nutrition policy, and may actually reduce the probability of being able to use some of the mechanisms implemented in the past in the attempt to improve national diets.

Following the ICN many countries have looked again at their national policies. In the many varieties of policy that have been developed there are some common themes that countries have identified as important: increases in daily energy supply above or up to a certain level; reductions in child malnutrition; reduction or elimination of vitamin A, iron and iodine deficiencies; reductions in food-borne diseases and in contamination and adulteration of food; increases in food trade; adoption of food laws, regulations and standards; and coverage rates for nutrition monitoring of vulnerable groups.¹⁰

What one can hope might be achieved is a focussed plan that is part of an overall national strategy. Many of the recently developed policies or national plans have in fact been part of a larger national development policy or a broader national health and welfare policy. Integration could and should be as great as possible, but the implementation should be the responsibility of definite departments or ministries taking a lead role. This lead role may merely be a facilitative, advocacy or regulatory one with, say, private enterprise actually getting on with iodizing the commercially sold salt. National Food and Nutrition Committees would have a policy formulating, coordinating, and perhaps even an evaluating role. However, focal units with as much power as possible would be responsible for the implementation, even when this means monitoring and facilitating the private sector.

Although not necessarily ideal, for the reasons given above, health ministries will often continue to take a lead role as it is their employees who are often the implementors of programmes. An agriculture ministry would have the lead role in household food security programmes and its extension officers would need to have an implementing and facilitative role. Often at the field or base level, the different approaches would become integrated again, but it would be important to avoid overloading the health or extension worker, who actually delivers the service.

Conclusion

This brings us back to an overall policy requirement, although not necessarily one called food and nutrition policy. The differences from the past are that such a policy would need to be less ambitious in structure, more targeted to the particular deficiency or non-communicable disease and with a middle structure that is fairly vertical and that allows responsibility to be attributed. The actual programmes would of course differ from country to country but certain common principles seem to apply.

There are hopeful signs: the higher priority of nutrition on the agenda of most countries; the real increases in knowledge, including in design and implementation of nutrition policies; the better relationship between agriculture and health; and the greatly enhanced experience with existing effective strategies and programmes that have been shown to work.

Virtually all countries, international agencies and non-governmental organizations have agreed on some common goals. The elimination of iodine deficiency disorders and vitamin A deficiency as public health problems by the end of the century are two such goals. Improving food security and reducing the impact of the non-communicable diseases are others. Although none of these will be easy to achieve, especially universal food security, there are some encouraging signs such as the widespread endorsement of the ICN goals, which will be enhanced through the adoption of appropriate national food and nutrition policies, national plans of action for nutrition, or other national strategies, all of which lead in the same direction, especially if translated into feasible, effective programmes.

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食物和營養政策的進展**摘 要**

全球估計超過 7 億人每日食物仍不足夠，超過 20 億人生存在缺乏必需維生素和礦物質的膳食中，這些維生素和礦物質對正常生長發育和預防過早死亡和殘廢，如失明和智力發育遲緩是需要的。同時，超過百萬人由于過食和膳食不平衡而患有慢性疾病。1992 年在羅馬由 FAO 和 WHO 主辦的國際營養會議上，159 個國家共同簽署了一份世界宣言，認識了營養／國民的食物和營養政策在國家計劃中的需要。代表們同意早前在世界兒童高峰會議所定下的目標應該加強和實現。政治因素將是對國民食物、營養政策和計劃成功的一個主要先決條件。這些既是現實的，很有想像力的，同時需要在所有層次，特別是授權的地方都能生效。實際上所有國家都同意建立適當的國民機構去發展，去貫徹和監控政策和計劃，以便在指定時間內改善國民營養，基于全國和地方的需要，提供適當的活動經費，全球聯合國組織中超過 120 個成員已決定加強改善營養的國民計劃。這些策略已提供了無法估量的經驗和效果，最後作者認為，今後應提供更多的評估。

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