
Background Papers
World Bank/UNICEF Nutrition Assessment

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Preface

UNICEF and the World Bank joined forces in April 1999 to provide a fresh perspective on the global effort to address malnutrition, with a focus on the roles of the two agencies in shaping this agenda and its implementation. The assessment attempted to “get behind the headlines” to understand how policy change in nutrition happened, what influenced these processes, and what lessons can be learned from them.

The assessment included three main components. **Background papers** (also referred to as the narrative theme papers) which presented an analyses of policy change in five key areas in nutrition. **Country case studies** which assessed the dynamics of nutrition-relevant policy processes at the country level and the role of the two agencies in India, Madagascar, the Philippines and Tanzania. **Agency portfolio reviews** of UNICEF and the World Bank which summarized their experiences with nutrition policy and programming support during the past two decades and described their priorities and processes. This volume is a compilation of the five background papers written by David Pelletier, Beatrice Rogers, John Mason, Lindsay Allen and James Levinson. Krishna Belbase did the final editing and compilation of the background papers.

The World Bank/UNICEF nutrition assessment was initiated and managed by Milla McLachlan (World Bank) and Roger Shrimpton (formerly of UNICEF) and coordinated by Stuart Gillespie (International Food Policy Research Institute). Guiding its preparation was a steering committee comprising Simon Maxwell of the Overseas Development Institute in London; Harold Alderman, Tim Johnson and Edna Jonas of the World Bank; and Krishna Belbase, Rolf Carriere, Ian Hopwood, and Werner Schultink of UNICEF.

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Acronyms

ACC/SCN	Administrative Committee on Coordination/Sub-committee on Nutrition
ADB	Asian Development Bank
AED	Academy for Education Development
AGN	Advisory Group on Nutrition
ANP	Applied Nutrition Programme
BINP	Bangladesh Integrated Nutrition Programme
CGIAR	Consultative Group on International Agricultural Research
CIDA	Canadian International Development Agency
CSD	Child survival and development
DALY	Disability-adjusted life-year gained
DFID	Department for International Development
DHS	Demographic and health survey
ECD	Early childhood development
EPI	Expanded Programme on Immunization
FAO	Food and Agriculture Organisation
GDP	Gross domestic product
GOBI	Growth monitoring, oral rehydration, breastfeeding and immunization
HKI	Helen Keller International
HDI	Human Development Index
IADB	Inter-American Development Bank
ICCIDD	International Council for the control of Iodine Deficiency Disorders
ICDS	Integrated Child Development Services
ICN	International Conference on Nutrition
IDD	Iron deficiency disorders
IDRC	International Development and Research Center
ILSI	International Life Sciences Institute
IMR	Infant mortality rate
INACG	International Nutritional Anemia Consultative Group
INR	Institute of Nutrition Research
IUNS	International Union of Nutritional Sciences
IVACG	International Vitamin A Consultative Group
JNSP	Joint Nutrition Support Programme
MCH	Maternal and child health
MI	Micronutrient Initiative
MUAC	Mid-upper arm circumference
NGO	Non-governmental organization
OMNI	Opportunities in Micronutrients Initiative
ORT	Oral rehydration therapy
PAHO	Pan American World Health Organization
PAMM	Programme Against Micronutrient Malnutrition
PEM	Protein energy malnutrition
PQLI	Physical Quality of Life Index
PRA	Participatory rural appraisal

PVO	Public voluntary organization
TFNC	Tanzanian Food and Nutrition Center
TINP	Tamil Nadu Integrated Nutrition Program
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Fund
UNICEF	United Nations Children's Fund
UNU	United Nations University
USAID	United States Agency for International Development
VAD	Vitamin A deficiency
WHO	World Health Organization

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Toward a Common Understanding of Malnutrition Assessing the Contributions of the UNICEF Framework

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1. Introduction

In 1990 UNICEF published a 36-page document entitled *Strategy for Improved Nutrition of Children and Women in Developing Countries*. The two key features of this strategy are a method for assessment, analysis and action related to nutrition (Triple A cycle) and a conceptual framework to guide the analysis of the causes of malnutrition in a given context. One of the primary motivations for developing this strategy and disseminating it vigorously within the international nutrition and development communities was the realization that our understandings of the nature of the “nutrition problem” in developing countries have changed dramatically over time, that there was great diversity in understandings across sectors, agencies and disciplines, and that this was contributing in a negative way to fragmented and often contradictory actions at national and international levels. The UNICEF Nutrition Strategy, and in particular the conceptual framework, sought to provide an explicit and unified perspective on the nature and causes of malnutrition in order to bring greater coherence and rationality to the effort to alleviate malnutrition in developing countries.

Roughly ten years after the publication of that document, a process was initiated for assessing the extent to which our understanding of malnutrition have changed, the role of the UNICEF framework, and the factors restraining wider adoptions and application. This was undertaken as part of a larger assessment to review efforts of UNICEF and the World Bank to address malnutrition and to develop renewed strategies. In keeping with the methodology chosen, this paper presents a narrative about these issues with the full recognition that the claims and explanations in this paper are more like working hypotheses rather than empirically-verified facts. These hypotheses were discussed with others in the international nutrition community at a workshop January 18-20, 2000 and modified slightly based on that feedback.

The paper is organized in five sections: 1) a description of the UNICEF conceptual framework; 2) a summary of how this framework differs from others existing prior to 1990 and in some development circles today; 3) a series of hypotheses concerning the extent to which this framework has become internalized; 4) an analysis of three case studies of the promotion and use of the framework; and 5) a proposed explanation for the pattern of internalization and the factors restraining its wider acceptance and application.

2. Description of the UNICEF Conceptual Framework

a. The Basic Framework

The UNICEF conceptual framework described in the 1990 UNICEF Nutrition Strategy document is shown in Figure 1. In the framework malnutrition and child death are viewed as two of the manifestations of a multisectoral development problem that can be analyzed in terms of the immediate, underlying and basic causes. The immediate causes are inadequate dietary intake and infectious disease; the underlying causes are household food insecurity, inadequate maternal and child care and inadequate health services and health environment; the basic causes include formal and non-formal institutions, political and ideological superstructure, economic structure and potential resources. Although more refined versions of this framework have since been developed, (e.g., adding female education just below the

underlying causes and distinguishing human, economic and organizational resources), all of them contain the basic elements shown in Figure 1.

This framework has become one of the most familiar images within the international nutrition community and has helped foster improved understandings and dialogue about the nature and causes of malnutrition. However, a proper understanding of its implications requires more than the summary provided in the previous paragraph. The nuances implied in this framework were described in the 1990 UNICEF Nutrition Strategy and have been repeated many times in the writings and verbal communications of the core group most active in its promotion. Among the hypotheses advanced in this paper are that the nuances have not been uniformly appreciated outside of this core group, that most of the perennial political and institutional conflicts in international nutrition are contained within these nuances and, as a result, this has prevented the international community from achieving the full positive potential of this framework. Accordingly, key elements of this more nuanced understanding are described below under the label of “the full framework.”

b. The Full Framework

Malnutrition as a manifestation: In the context of the UNICEF Nutrition Strategy malnutrition is viewed as one important *manifestation* of a larger development problem. As such, the goal is not only to eliminate the manifestation (i.e. the symptoms) but to address the development problem itself. This is not to diminish the importance of malnutrition and child death in any way, but only to be clear that the way in which these manifestations are addressed is also important. From this perspective, the recent interest in alleviating micronutrient malnutrition would be regarded as attacking the manifestations but in most cases doing little to address the root causes which lie in the larger development problem.

Context-specificity of underlying causes: The framework does not imply that food, health and care are inadequate in all settings. Rather, it implies that these three define the full range of possibilities and the relative importance of each must be assessed and analyzed in each setting in order to define priorities for action (Triple A cycle). In addition, this context-specificity applies at household, community, district and national levels, such that the Triple A cycle ideally should be applied at each level. The dominant problem may relate to health conditions in a given community but individual households may still face problems related to food insecurity and/or care. This heterogeneity in causes is one of the rationales for highly de-centralized approaches emphasizing capacity-building and community participation within the larger UNICEF Nutrition Strategy. If this had been fully appreciated and taken seriously by the international nutrition community, especially the donors, it is likely that far more training and institution-building would have taken place, notably in Sub-Saharan Africa. Moreover, if context-specificity had been taken seriously, we would have expected to see a high degree of inter-agency and inter-ministerial coordination taking place within countries in order to respond appropriately to geographic heterogeneity.

The effects of food and health are contingent on care: The overlapping circles among Food, Health and Care in Figure 1 are meant to imply that these three are related to each other in complex ways, which must be analyzed and properly understood in a given context in order

to design appropriate actions. For instance, food secure households may still contain malnourished children because the burden of women's agricultural and other work (as well as other factors such as inadequate caretaker knowledge) may compromise the quality of child care. Moreover, efforts to *increase* household food security may increase or decrease child (and maternal) malnutrition, depending upon how this is achieved. Similar contingencies exist between Care and Health. If this has been widely appreciated and taken seriously, we would expect to see a strong focus on women's time allocation, household division of labor and community child care arrangements in a wide range of sectoral development work (e.g., agriculture, rural development, income generation, workforce preparation, etc.). It is not clear to what extent this has occurred.

Triple A as applied to causes, resources and power: The UNICEF Nutrition Strategy emphasizes the importance of developing a sound understanding of the causes of malnutrition in a given setting in order to design appropriate actions. In the most common interpretation of the framework, this relates to the immediate and underlying causes shown in Figure 1. This emphasis on understanding causes reflects a view that the perception of the problem by actors at any level of society has a major influence on which actions are deemed relevant and how resources are deployed. However, perceptions are not the whole story. The UNICEF strategy further suggests that an analysis of *basic causes* be undertaken, specifically the human, economic and organizational resources potentially available at each level (household through international) and how those resources are controlled at each level (formal and non-formal institutions, political and ideological superstructure and power). The strategy suggests that the analysis of these basic causes should begin at the household/community levels in relation to the relevant causes in a given setting and only proceed to higher levels when the necessary resources cannot be mobilized at those lower levels. Analysis of these basic causes is to be accompanied by essentially political actions such as awareness-raising, advocacy, cultivation of strategic allies and other actions to build political commitment and re-direct resources in appropriate ways. Among the hypotheses developed in this paper are that this aspect of the conceptual framework commonly has been misunderstood (e.g., by assuming the basic causes only are relevant at the national and international levels), given little systematic attention in training, and intrinsically is the most difficult aspect to operationalize.

Poor people as actors in their own development: The Nutrition Strategy stresses the importance of engaging households and communities in assessment, analysis and action, as opposed to a heavy reliance on external institutions or expert analysts.

3. Comparison to other views of malnutrition

In attempting to assess the extent to which the UNICEF framework has become familiar, understood and applied within the international nutrition/development community, it is necessary to not only describe it in its right (as above) but also clarify precisely how it differs from other views. This will provide valuable clues for assessing the extent to which the framework has been adopted, in the country case studies and more broadly. Some of the key distinguishing features are discussed below.

One of the most important features of alternative views of malnutrition is the absence of an *explicit* conceptual framework combined with some *implicit* notions that deviate widely from the UNICEF framework. The implicit notions often are:¹

- mono-focal (they emphasize a limited set of potential causes);
- universal (they underestimate context-specificity);
- insular (they underestimate the linkages among causes of malnutrition);
- supply-oriented (they emphasize problems in the supply of food, nutrients or health services);
- excessively macro or micro in perspective (they either focus at the individual behavioral or biological level, or at the level of aggregates like markets or food supplies);
- discipline-bound (they emphasize the perspectives from one or a limited range of disciplines);
- expert-oriented (they overestimate the ability of experts and outsiders to analyze and comprehend the complex realities that create malnutrition and they overestimate the degree to which experts, outsiders or governments can control the process of social and behavioral change. Related to this, they underestimate the importance of local or community knowledge and the important role of communities in social change).

Some of these features are further elaborated and linked to the UNICEF framework below.

a. Context-specific: The framework identifies the range of potential causes for *consideration* in all settings, as opposed to a notion of “universal” causes common in earlier periods and in some views still expressed today. The use of a pre-packed set of technical interventions or approaches may signal that “universal causes” are being assumed. Alternatively, it may actually reflect that a sound analysis has been conducted, revealing a certain set of causes of such high and uniform prevalence that the costs of targeting outweigh the benefits. In the latter case one would expect to find evidence that such an analysis took place.

b. Multisectoral actions and cross-sectoral linkages: The framework acknowledges that multisectoral actions may be needed and that the actions in one sector (e.g. agriculture) may have positive or negative impacts in another (e.g., women’s time available for child care). It argues that these linkages should be explored and actions within any given sector should take them into account. In this sense, it is the responsibility of each sector to be aware of these potential relationships, do this type of analysis, and take actions that support rather than undermine nutrition. The key implication is that nutrition goals should be part of the other goals of a given sector or institution and that this reflects a serious commitment. Two of the common alternative views that reflect insularity and a mono-focus are: 1) the activities in a given sector (e.g., agriculture) will contribute to improved nutrition of their own accord, such that special “nutrition analysis” and program re-design are not necessary; and 2) nutrition improvement is not the primary concern of the sector, institution or program and is the responsibility of other sectors, institutions or programs.

¹ These are well-illustrated in *Manual on Food and Nutrition Policy*, FAO 1969 and Lunven (1985) *Food and Nutrition: Evolution of Strategies*, *Food and Nutrition* 11(1):2-16.

c. Multi-level thinking, analysis and action: In keeping with context-specificity most national programs should have built-in mechanisms for conducting Triple A processes at a decentralized level and choosing/adapting actions at lower levels. Moreover, explicit efforts to mobilize resources at each level should be apparent (starting at household and proceeding to international as required). This is as opposed to programs based entirely, or largely, on national resources with little or no local resource mobilization or, alternatively, programs based entirely on household or community resources even when the situation calls for external inputs and/or policy changes. Deviations from this principle sometimes may exist for good reasons, but one would expect this to be supported by evidence that an assessment and analysis took place and revealed the need for a heavy external intervention or an exclusively household or community approach.

d. Actions consistent with the analysis: Nutrition improvement is often claimed as a justification for a wide range of sectoral actions (e.g., agriculture, health, food aid) but analysis of the types of actions being taken often reveals this is based on a questionable set of assumptions (e.g., that increased food production in a district will improve nutrition, or that supplementary feeding will improve nutrition when the problem lies with health and care). If the UNICEF framework is being followed faithfully in a given setting, one would not expect to find such examples. When such examples do exist it may reflect faulty analysis, out-dated perceptions of the problem, and/or strategic framing/manipulation of the problem to meet more narrow institutional interests. Some of the common reasons for these cases (apart from strategic manipulation) relate to the features noted above (mono-focal, insular, discipline-bound, macro- or micro- focus, supply orientation).

e. Actions at multiple causal levels: The UNICEF framework identifies immediate, underlying and basic causes and notes that all three categories operate at EACH level from household to international. The Nutrition Strategy identifies common types of actions for consideration (from micronutrient supplementation to policy dialogue on country strategies). It suggests that the choice and sequence of strategies should be based on a combination of good analysis and feasibility, but in all cases there should be an *on-going process* of strengthening nutrition-relevant Triple A processes related to all levels of causality and at each administrative level from household to international. As such, the “core” of the UNICEF Nutrition Strategy is an on-going strengthening of Triple A processes rather than a heavy reliance on a fixed set of national actions. Countries or settings pursuing a limited set of supply-oriented action strategies (e.g., micronutrients, breastfeeding promotion and complementary feeding), even when those actions are based on sound analysis, reflect an “alternative view” of nutrition in which the goal is mobilization of programs. While it is appropriate that most attention and resources at any given time be devoted to action and not planning, a country embracing the full UNICEF view also would be engaged in a conscious effort to strengthen the Triple A capacity at multiple administrative levels and national staff would be able to articulate the rationale for doing so.

4. Internalization of the UNICEF Framework

An analytical framework for discussing the extent of internalization of the UNICEF conceptual framework is shown in Figure 2. As shown, it is proposed that internalization be considered in terms of four criteria: awareness of the visual image of the framework, degree of understanding of the nuances and implications of this framework, incorporation of the framework into one's own written and verbal communications, and translation into organizational agendas. In addition, three "epistemic and policy communities" are distinguished, representing staff from: international agencies and PVO's, country institutions and PVO's, and research institutes and universities located in developing or developed countries.

As shown in Figure 2, nutrition staff in all three institutional settings are hypothesized to have a high awareness of the visual image and a high degree of incorporation of at least some elements of the framework in their own written and verbal narratives. The elements most commonly incorporated by these staff are the food, health and care concepts, the notion of immediate, underlying and basic causes, and the notion that the framework should be used in conjunction with the Triple A cycle to assess the causes in a particular context. It is hypothesized that these staff have a medium (or mixed) degree of understanding of the nuances and/or full implications of the framework. The basis for assigning these results is that these staff are part of the nutrition epistemic community targeted and reached by UNICEF and its core group. In particular, these are the staff likely to receive the UNICEF "Paper of the Month" mailings and to participate in national and international meetings where the framework has been discussed (notably those leading up to and following the International Conference of Nutrition in 1992, but not limited to those). Even while assigning these relatively favorable results to these categories of staff, it is hypothesized that significant variation exists across countries and settings.

In contrast to these generally favorable results for three of the criteria, nutrition staff in international agencies and developing countries are hypothesized to score "low" in terms of translating the framework into changes in their organizational agendas. This is because these staff likely have less control over the actual decisions, actions and resource allocations of their organizations than they do over their own awareness, understanding and internalization. "Objective" evidence in support of this hypothesis is: 1) there has been a shift in institutional agendas and resources (in absolute terms and as a proportion of the total) toward actions like micronutrient strategies, breastfeeding promotion and low-cost packages of health services, with the presumption that other aspects of the UNICEF strategy have received less attention; and 2) in Sub-Saharan Africa where capacity building is in greatest need, a coherent, vigorous, donor-supported effort at capacity-building has yet to emerge. Other evidence may exist. Translation into organizational agendas is scored as "medium" in universities and research centers, primarily because staff in these centers have relatively greater autonomy to adjust their research agendas and curricula in response to changes in thinking. Even here, however, great heterogeneity is hypothesized to exist because of the entrenched nature of research agendas and curricula in these institutions. It is likely that those changes that have occurred have been led by a relatively small number of individuals directly involved with the development and dissemination of UNICEF's framework and strategy over the past decade.

With regard to non-nutrition staff in these settings, a much more pessimistic picture is hypothesized to exist. Apart from medium-level awareness of the visual image in international and developing country institutions, it is hypothesized that all other criteria are low or very low in all three settings. While exceptions undoubtedly exist, these low ratings occur because most non-nutrition staff only are tangentially and irregularly part of the nutrition epistemic community and they do not necessarily share the same institutional and professional goals, values, beliefs and incentives. Perhaps more interesting than this overall prediction is the acknowledgement that some “positive deviants” are likely to exist, and a careful analysis of the factors responsible for this could yield useful insights for future strategies.

5. Analysis of case studies

While the results in Figure 2 offer some insight into overall patterns of internalization, it is useful to examine specific case studies of how the framework was promoted and used in order to gain more detailed insights. The boxes (annex 1-3) below summarize three contrasting case studies. The first consists of the efforts by UNICEF headquarters to promote the framework within its own and other organizations. The second is from Brazil where civil society groups used the framework to advocate for social change related to food insecurity. The third case is from India where a small team of policy entrepreneurs and strategic allies used the framework and survey data to overcome strong bureaucratic pressure and convince government officials to focus on Care rather than supplementary feeding in a large public health program. These three cases reveal a number of important lessons as described below.

a) **Opportunism in policy change:** The three case studies (and many more that could be identified) reveal that the adoption and use of the framework is associated with a high degree of opportunism and “re-interpretation” of the framework to fit organizational agendas. In the Brazil case, this took the form of emphasizing the potential link between food insecurity and child malnutrition in advocacy efforts by civil society groups with little evidence that the strength of this link was explored or confirmed in the national or local contexts. In the India case, the framework was used to interpret the DHS survey data (highlighting malnutrition in the 6-18 month period) as being due to inadequate caring practices, in order to advocate against the use of supplementary feeding in ICDS III. In the case of UNICEF headquarters, the framework was used to justify a focus on micronutrients on the grounds that food, health, care and capacity-building all were involved in micronutrient problems and solutions, in addition to those pertaining to PEM. These cases highlight that the UNICEF framework and nutrition strategy were used selectively by various stakeholders to advance their favoured notions of critical problems and appropriate actions, a feature of the policy process well-documented in the larger policy literature. While this selectivity and creativity may be necessary and unavoidable, it appears to run a high risk of turning the framework into an advocacy tool for justifying favoured actions, in the absence of a legitimate assessment and analysis in the local context. This highlights the importance of distinguishing between the “basic” and the “full” framework in analysing its utilization.

b) **Policy entrepreneurs and networks:** The three cases clearly reveal the role of key individuals and strategic alliances within a network of actors in promoting policy change. It

is of interest to note that this network need not be large in terms of numbers of individuals. In all three cases the process began with a small number of committed individuals that shared common goals and either developed change strategies and/or seized windows of opportunity for pursuing their goals. It appears important to develop strategic alliances with a small number of well-placed or effective individuals at an early stage in many cases, although for UNICEF headquarters it also was important to develop a strategy for mass promotion of the framework because of its international perspective. This points to a potentially high pay-off for efforts devoted to the training and mentoring of policy entrepreneurs within the international nutrition community. One dilemma, as noted above, is that some of the entrepreneurs and networks will use the framework in a selective fashion to advocate for their favoured problems or solutions (often influenced by institutional biases), regardless of whether or not this is associated or consistent with a sound assessment and analysis.

c) Influence can lead to authority: One of the disadvantages facing nutrition promoters is that they often lack authority, institutional backing and resources for advancing and implementing nutritionally favourable actions. However, the three case studies, like many others in the policy literature, reveal that this does not mean they are without power. In all three cases the nutrition promoters had to rely upon their ability to influence others, with that influence eventually leading to authoritative changes. For UNICEF this was the adoption of the framework by headquarters and many field offices, as well as the other stakeholder categories noted in Annex 1. In Brazil this took the form of a national food and nutrition policy that was based on the framework. And in one state in India it was a decision by government authorities to focus on Care instead of supplementary feeding on a pilot basis in a few areas. These cases, together with the emergence of the human rights perspective, reinforce the notion that efforts to train and support policy entrepreneurs may yield high pay-offs.

6. Factors associated with internalization of the UNICEF Framework

In seeking explanations for this hypothesized pattern of internalization, four types of theoretical frameworks were consulted related to: a) diffusion of innovations; b) knowledge utilization; c) normal and paradigmatic policy change; and d) the politics of problem definition and garbage can model of organizational behaviour. These theoretical frameworks were chosen because each offers some unique insights not contained by the others and, together, they suggest how/why the UNICEF framework and strategy was or was not internalized in various institutional settings.

a) Diffusion of innovations: According to this model, the adoption of innovations is a function of the extent and type of diffusion of information about the innovation as well as certain characteristics of the innovation itself. Diffusion is defined as the process through which information about an innovation is communicated through channels over time among members of a social system. As noted above, it is likely that the communication channels used by UNICEF had greater coverage and were more effective among members of the international *nutrition* community than among non-nutrition staff in international agencies, country institutions and universities/research centers. It is important to note that, in general, information about innovations is more likely to be attended to and accepted if it is provided by respected peers in a given social system than non-peers. It is a plausible hypothesis that

the non-nutrition sectors and institutions in these three settings did not have many influential peers promoting the UNICEF framework, whereas the nutrition sectors and institutions enjoyed a strong cadre of such promoters as the result of a concerted promotional strategy initiated by the nutrition cluster in UNICEF headquarters during the 1990's.

With respect to the characteristics of an innovation itself, Figure 3 shows the factors that enhance the probability innovations being adopted, along with proposed ratings for the UNICEF framework from the perspective of nutrition and non-nutrition staff. According to this framework, the UNICEF framework receives generally high ratings from the perspective of nutrition staff in the three settings, but low ratings on three of the six criteria from the perspective of non-nutrition staff. This would have combined with the less effective diffusion mechanisms noted above, to produce the lower ratings for internalization shown in Figure 2.

The diffusion of innovation theory is one way of viewing the conditions under which ideas or practices might be adopted, but it was not developed specifically with policy communities in mind. It is a useful way to *start* thinking about the process but theories developed from studies in policy communities have provided much richer understandings of the process. Three of these are used below, to help analyze the experiences with the UNICEF framework.

b) Knowledge utilization: Arising in part from a concern that the results of policy analysis and program evaluations were not being used in decision-making, an entire body of literature was spawned beginning in the late 1970's to pose and investigate potential explanations. One of the enduring insights from this field involves the distinction between *instrumental* uses of new knowledge (direct, traceable impacts on specific decisions) and the *diffuse enlightenment function* of new knowledge. The latter refer to the fact that the findings from research, policy analysis and evaluations may alter the basic concepts and understandings of an issue without necessarily having a demonstrable impact on specific decisions. According to this view we systematically underestimate the impact of new knowledge when we restrict the concept of "utilization" to the instrumental variety. On the other hand, the diffuse enlightenment function is inherently difficult to demonstrate in empirical studies because a particular set of new constructs or relationships (such as those embodied in the UNICEF framework) may become co-mingled with a complex background of prior conceptions and emerging patterns of thought. This appears to be a real possibility in the present case because the UNICEF framework explicitly seeks to *build upon* existing scientific knowledge by organizing and presenting it in a particular way, rather than inventing concepts previously unknown to the international nutrition community.

When these distinctions are applied to the hypothesized results in Figure 2, it highlights several possibilities. First, it suggests that positive results on the first three criteria (among nutrition staff) all provide some degree of *presumptive* evidence that the UNICEF framework may have had a variety of impacts on decisions and actions even if they could not be definitively traced to that source. Related to this, it highlights that the fourth criterion (translation into organizational agendas) refers only to those rather clear cut cases in which instrumental impacts have taken place. Third, it opens up the possibility that some non-nutrition staff in various institutions may have been indirectly influenced by the framework via the diffuse enlightenment function, either by being exposed to the visual image itself or by

being exposed to or taking part in development and policy discourse that itself has been influenced by the framework. Finally, this entire discussion highlights the complexities involved in trying to attribute changes in thinking and decisions directly to the UNICEF framework, except in those (minority of) cases where there is a clear and conscious connection.

c) Normal and paradigmatic policy change: The UNICEF framework and the associated nutrition strategy represents, in the words of one of its chief proponents, a “new development paradigm.” The origins of this new paradigm are many and complex. They include, beginning in the mid-1970's, a retreat from highly centralized planning and development approaches; a growing awareness of the limitations of government-led approaches for solving complex development problems; disappointment with the result of narrow “magic bullet” solutions; the embrace of community-based primary health care strategies (as reflected in Alma Ata, 1978) and rural development planning more generally (a la Chambers RRA and PRA, among others). The UNICEF framework was fully consistent with the principles and approaches enunciated in Alma Ata², bolstered by the very positive results obtained in its implementation in Iringa, Tanzania during the 1980's.

The paradigmatic differences between the UNICEF strategy and the dominant approaches that preceded and followed it may be, at once, its greatest strength and its greatest source of difficulty when viewed from the perspective of the literature on the nature of policy change. In the words of one public policy scholar:

² See, for instance, *The Role of the Health Sector in Food and Nutrition*, WHO Technical Report Series No. 667, 1981, pp. 10-22.

“There is a surprising degree of continuity in public policy, as evident in literally thousands of case studies of disparate policy sectors in a multitude of countries showing that most policies made by governments are in some way a continuation of past policies and practices. [...] most analyses attribute continuity in policy making to the fact that the same set of actors is typically involved in the policy process over a long period of time. [...] only when a policy monopoly is broken by the emergence of new members or subsystems would one expect a policy to change in any significant sense of the term.”³

Apart from noting this modal tendency for incrementalism in policy change, this literature further reveals a set of factors that affect the prospects for paradigmatic policy change. These relate to: a) the internal structure of the policy subsystem (i.e., is it a stable structure, is there consensus about desirable policies, is there a growing perception of inadequacy of present policies, does the structure and incentive systems of the epistemic community lend itself to adopting or resisting new ideas); b) external shocks (economic, social, political) that can precipitate a rush to a fundamentally new approach; and c) the behaviour and interests of *related* policy subsystems containing groups that may resist change if it threatens their interests. The latter is a particularly important consideration in the present context because nutrition is inherently located within and between several policy subsystems rather than constituting a subsystem of its own.

When analyzed from this perspective, it is likely that UNICEF was reasonably successful in influencing that portion of the international nutrition community with which it had effective contact and communication, which had come to some agreement about the inadequacy of past approaches to malnutrition, and which had been influenced by the broader shifts in thinking associated with Alma Ata and rural development strategies during this period. The attractive features of the framework noted in Figure 3, the purposeful promotional strategy by a senior-level core group associated with UNICEF, and the positive results from Iringa all may have contributed to the success with this particular community. However, given the multiple policy subsystems that are related to nutrition, and the fact that UNICEF only had the power to persuade and not coerce, one would predict a rather uneven “buy-in” process. Specifically, one would expect resistance to be greatest in those cases in which sectoral, institutional or policy subsystem interests would not be well-served by embracing the UNICEF framework. This involves sectors like health, agriculture, economic planning and education where adopting nutrition goals as implied by the UNICEF framework is seen as *complicating* the traditional goals or competing priorities of those sectors.

d) The politics of problem definition and the garbage can model of organizational behavior:

Although the subsystem model might explain resistance to adopting the UNICEF framework within countries with relatively pluralistic policy subsystems, it is less convincing for explaining the patterns of adoption or resistance by international agencies (and ministries, to a lesser extent) that have a relatively more hegemonic approach to the choice and definition of problems and solutions. Understanding the reasons for resistance/adoption in these

³ Howlett and Ramesh 1995, *Studying Public Policy*. Oxford University Press, pp184-185.

institutions is of particular importance because of the strong role they play in shaping understandings and strategies at country level. As stated by one prominent nutritionist in a developing country:

“Donor agencies often appear to have a nutrition strategy in search of a problem. A global agenda is established at headquarters and passed on to country offices for implementation as a package. Any deviation from the package is quite difficult and is not encouraged. [...] There appears to be reluctance to adapt the strategy to suit local conditions, even when it is painfully obvious that this should occur, or to change the package completely if the perceived priority by nationals is different.”⁴

This author provides additional insight into the situation when she says:

“There is a need for agreement or a shared understanding of the nature and magnitude of the problems and the priority approaches to address these problems at the country level between the donors and the country. [...] Donors rarely coordinate and harmonize activities and resources at the country level. Coordination and harmonization of strategies has improved considerably at the headquarters because of the SCN. Unfortunately, this harmony between lead nutrition agencies has not always been reflected at the country level where sometimes interagency rivalries dominate. Agencies with nutrition relevant mandates often fight each other for territory [...]” (ibid, p. 8)

It is noteworthy that this was written in 1994, by which time the UNICEF framework had been intensively promoted for about six years, and two years after the International Conference on Nutrition (ICN) had been convened. In contrast to what might be inferred from the above quote, the UNICEF framework was vigorously *resisted* by the lead nutrition agencies in the preparations for the ICN, and the politics on the SCN at that time were anything but harmonious. It is because of observations like these that Figure 2 assigns a rating of “low” for the criterion dealing with the translation of the framework into organizational agendas.

Although the explanation for this behavior that one hears after working hours revolves around allegations of “pig-headed behavior” and “personality conflicts,” the fact that such explanations tend to be offered by each of the parties suggests that more systemic principles may be operating. Indeed, organizational theorists and policy scholars have studied the interactions within and between organizations and offered some broader systemic explanations. Two closely related explanations that seem particularly appropriate for the present case are captured under the phrases “the politics of problem definition” and “the garbage can model” of organizational behavior.⁵

⁴ Tagwireyi, J., 1994 *Time for a Change? A Field's Eye View of Donor Agency Support for Nutrition*. Seventh Annual Martin J. Forman Memorial Lecture. June 27, 1994, p. 6.

⁵ See for instance: *The Politics of Problem Definition* by Rochefort and Cobb, 1994; and Cohen et al., (1972) A Garbage Can Model of Organizational Choice, in *Administrative Science Quarterly* (March):1-25.

The literature on the politics of problem definition maintains that the way in which a problem is defined and understood is itself a political (and sometimes conscious) act that has a powerful influence on notions of problem ownership or responsibility, notions of appropriate and favoured solutions, and the degree of support or opposition from various institutions or interest groups. It is not surprising, therefore, that policy researchers have observed that a perennial struggle exists with many problems, in which various institutions, interest groups and professions or disciplines advance their own interpretations of the nature of the problem and favoured solutions and, in the process, seeking to advance their own interests. Although this struggle is often conscious and overt for some of the actors, in many others cases (notably professional staff with a strong expert orientation) actors may perceive that the struggle is primarily about the scientifically most accurate definition of the problem (according to their disciplinary perspective), or the most effective or cost-effective solution to the problem.

The garbage can model of organizational behavior is consistent with this view but has its origins in an examination of the politics taking place *within* organizations. According to this view, actors within an organization also vie for opportunities to advance or maintain their own interests and agendas, and much of this has to do with framing problems in certain ways, asserting higher priority for some problems over others, and promoting certain “solutions” over others. Novel problems or novel ways of framing old problems may be embraced or resisted depending upon how one’s interests and agenda might be affected. Recently the garbage can model and the dynamics of problem definition have been effectively combined to describe the behavior of policy subsystems.⁶

The above descriptions appear to fit quite well with the history and current status of the international nutrition community, as it has shifted and struggled within and between the eras of protein deficiency, the energy gap, the protein-energy malnutrition era and our current micronutrient-dominated era. Imbedded within these eras have been struggles and disputes over food production-based approaches, food aid, disease control, nutrition education, commercial weaning foods, technological fixes vs. social reforms, and so on. Although there is a scientific component to each of these themes, there also are institutional, professional, commercial and political interests at stake.

These perspectives provide some useful insights and predictions regarding how and why the UNICEF framework may have been internalized or resisted by various groups. First, they suggest that internalization is most likely when the interests and agendas of various institutions or actors may be advanced by doing so. Second they suggest that internalization is more likely to be selective rather than complete, such that some actors or institutions may use a portion of the framework (e.g., food security) to bolster its claim to be addressing malnutrition (e.g. by promoting food production or food aid), while conveniently ignoring other aspects of the framework (e.g., the effect-modifying role of Care). Third, these theoretical perspectives highlight that fact that the struggle to improve actors’ *perceptions* of the problem and its causes is a necessary but not sufficient part of the effort. Equally important, as noted but often overlooked in the UNICEF Nutrition Strategy, is the need to do

⁶ Kingdon, JW 1995. *Agendas, Alternatives and Public Policies*. Second Edition. Harper-Collins.

an analysis of the resources and power of various institutions and actors and to base a mobilization strategy on the results of that analysis. The literature noted above leads to the prediction that an important feature of this mobilization strategy might be to foster a process by which “all” the relevant actors and institutions can engage in the framing and definition of the problem, so that the resulting causal framework embraces their interests and agendas (not just their perceptions) and allows for political negotiation and compromises to be made in the process. This is a process that was not followed in the case of the UNICEF framework and may account for some of the patterns in internalization hypothesized here.

7. Summary: A synthetic framework for policy evolution

This paper suggests that the UNICEF conceptual framework was effectively adopted and internalized by some institutions and actors within the international nutrition community, it may have had indirect effects in a yet larger set of actors, and it may have been resisted or had minimal effect in yet another set. It is suggested that this pattern conforms to expectations based on experiences in other policy arenas and the existing scholarship in these issues.

By way of facilitating further discussion and future efforts to analyze and promote policy change, Figure 4 is a conceptual framework of the evolution of issues within policy communities, drawn from the literature referred to above. As shown, issue salience (in this case malnutrition) is a central feature of this framework, is highly subjective, and it is intimately related to how the issue is framed and understood. The model maintains that the evolution of policy (at the right side of the Figure) is, in a proximate sense, a function of the participation, power relations and nature and quality of discourse, all of which are governed by institutional forms, rules and norms. Participation, power and discourse, in turn, influence and are influenced by the framing and salience of the issue. Framing and salience, in turn, also are a function of the variation and distribution in values, beliefs and perceived interests associated with the issue. Another significant factor is the fragmented nature of knowledge and understandings concerning the issue, with the fragmentation being created by diversity in organizational and professional affiliation, bureaucratic and academic structures, and life experiences. All of these factors operate within and are affected by some broader sociological factors such as social structure, the sociology of expertise, the social climate, and community or organizational history.

It is important to note that, like UNICEF’s causal framework, this is a conceptual rather than a prescriptive model. As such, the relative importance of a given factor or set of factors may vary as a function of settings, chronological time, competition with or reinforcement by concurrent events and issues, and a host of other contingencies.

For present purposes, this framework clearly shows that the diversity in *perceptions* of the nature and causes of malnutrition prior to and subsequent to the launching of the UNICEF framework is a function of fragmented knowledge, but this is only one of many factors at play. Other factors as described in this paper are the implicit or explicit values (instrumental goals and normative principles), beliefs (ideological commitments) and interests (egoistic, material, professional, organizational). These latter factors clearly vary across actors and institutions in the international nutrition community and this paper maintains they are

crucially important for explaining the patterns of adoption and resistance. Finally, the figure suggests that the patterns of adoption and resistance were influenced by issues related to participation (who, when, where, how did various parties participate in framing the issue), their power relations (once the framework was established, UNICEF could only persuade but not coerce) and the nature, quality and contexts for discourse during the framing or promotion of the framework (e.g., the SCN probably was not a very conducive context for constructive discourse). Apart from helping to explain patterns of adoptions/resistance in the past decade, this framework may facilitate the design of future policy change efforts related to broad issues like problem framing as well as specific policy deliberations related to interventions options. It also may help guide the design of future case studies seeking to document and analyze the process of change in nutrition policy.

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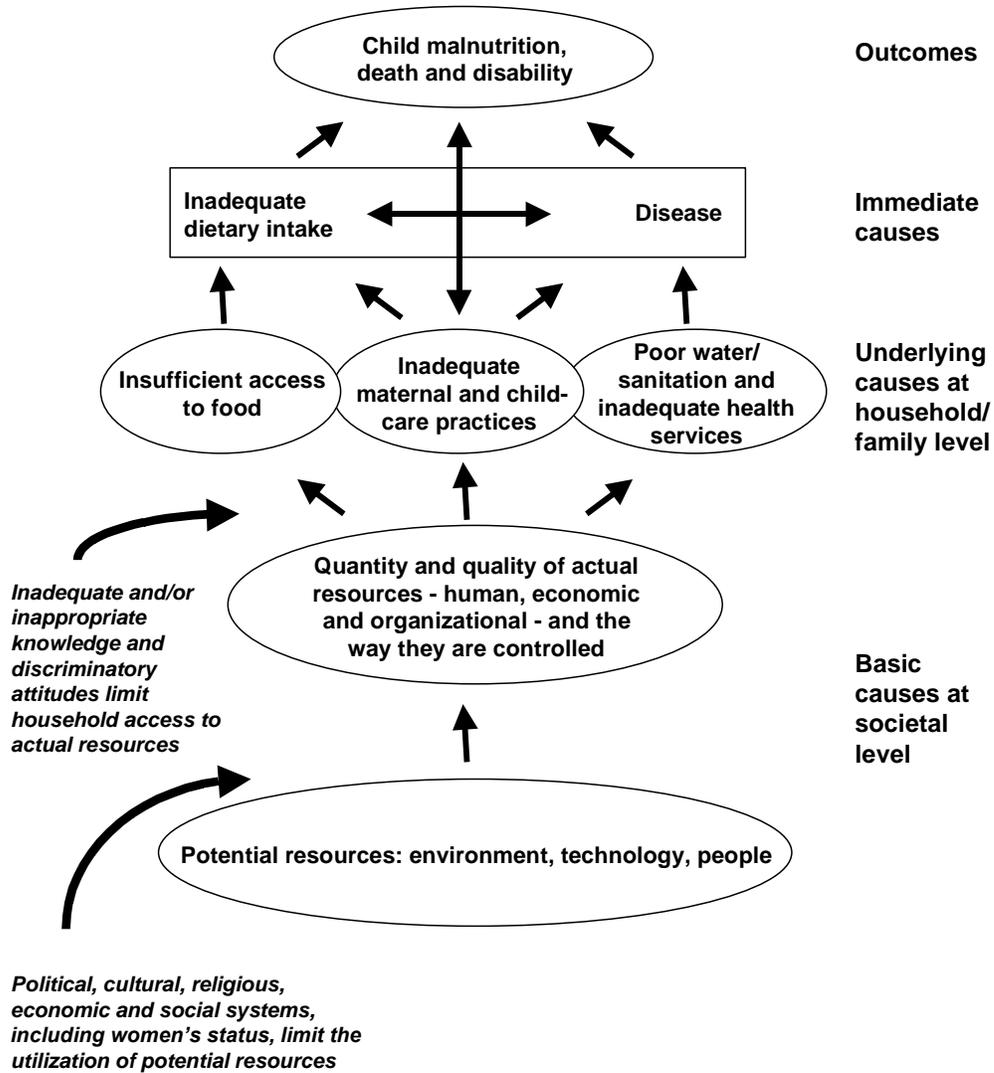
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Figure 1: Causes of Child Malnutrition



Source: The State of the World's Children 1998

Figure 2
Hypotheses concerning the internalization of
the UNICEF nutrition framework and strategy

Criteria of Internalization	UNICEF		International Agencies/ PVO's*		Developing Country Institutions & PVO's**		Research Institutes & Universities ***	
	Nutr Staff	Other Staff	Nutr Staff	Other Staff	Nutr Staff	Other Staff	Nutr Staff	Other Staff
Awareness of the Visual image	High	High	High	Med	High	Med	High	Low
Degree of understanding Of nuances & implications	High	Med	Med	Low	Med	Low	Med	Low
Incorporation into own written and verbal narratives	High	Low	High	Low	High	Low	High	Low
Translation Into organizational Agendas	Med	Low	Very Low	Low	Very Low	Low	Med	Very Low

* Presumed to include UNICEF, WHO, FAO, WFP, World Bank, ACC/SCN and bilaterals, plus PVO's such as HKI, Care, World Vision.

** Assumed to include headquarters staff in ministries of health and agriculture plus national PVO's.

*** Assumed to include national universities and research centers in developing countries that focus on matters related to nutrition and "Food, Health and Care" as well as international or developed country institutions such as IFPRI, the CGIAR, Wageningen, London School, Cornell, UC Davis, Emory, Johns Hopkins, Tufts and Tulane that are actively involved in international nutrition research.

Figure 3
Rating the UNICEF Framework from the Perspective of Diffusion Theory

Characteristic	Explanation	Rating of UNICEF Framework for Nutrition Staff	Rating of UNICEF Framework for Non-Nutrition Staff
Ease of understanding	how difficult is it to understand and use	High (for basic understanding, but nuances require more exposure to it)	High (for basic understanding, but nuances require more exposure to it)
Compatibility	how consistent is it with values, habits, experiences and needs of potential adopters.	Mixed (it differs markedly from traditional views but meets a widely-recognized need)	Low (it requires adopting nutrition as an important goal)
Relative Advantage	degree to which it is viewed as better than the idea, practice, program or product it replaces.	High (once it is understood)	Low (it does not help reach non-nutrition goals)
Flexibility	range of settings and situations the innovation can be adapted to fit.	High (although institutional interests may impeded its use)	Low (it does not help reach non-nutrition goals)
Trial ability	extent to which it can be experimented with before being adopted.	High (through mental testing of its logical structure)	High (through mental testing of its logical structure)
Observability	extent to which it provides tangible or visible results.	Mixed (its logic can be tested with others but its utility in practice requires more time)	Mixed (its logic can be tested with others but its utility in practice requires more time)

Conditioning Factors:

Social Structure, Sociology of Expertise, Sociopolitical Climate, History

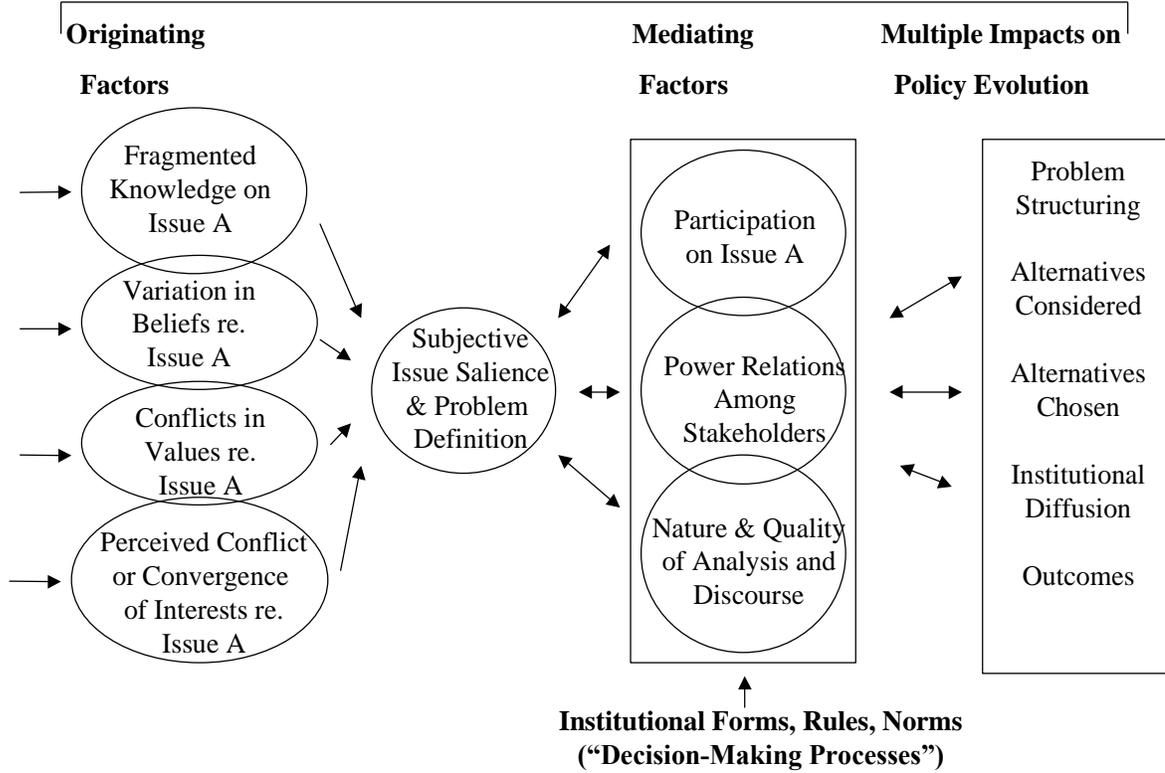


Figure 4: Conceptual Framework for the Evolution of Issues Within Policy Communities

	Annex 1 Chronology for development and promotion of the UNICEF framework
1981-89	Design, Implementation and Evaluation of Iringa Nutrition Program showing dramatic impacts on child nutrition. Joint effort of TFNC and UNICEF with funding from Italian government (JNSP).
1989-90	*Consolidation of experiences and insights from Iringa; Richard Jolly learns of Iringa approach and asks Jonsson to become Nutrition Advisor at UNICEF/NY; *Jim Grant and UNICEF Board adopt a nutrition strategy based on the conceptual framework, Triple A cycle and related concepts from Iringa.
1990-	*Nutrition Section declines opportunities to make nutrition a “UNICEF priority” in order to provide space to operate and avoid high levels of scrutiny and fanfare. *Nutrition Section identifies 15 “priority countries” based on known receptivity of country representatives to the nutrition strategy; these countries become the laboratories for expanding the framework and broadening its network of advocates. *Nutrition Section identifies and develops about 12 UNICEF “believers” in the framework who become the core group of promoters and trainers, 35 consultants and strategic allies outside UNICEF, 40-50 allies in governments and NGO’s, and a mailing list of 800 people in country offices, government institutions and NGO’s (for “Nutrition Paper of the Month”). About 150 country staff are trained in 10 day training programs.
1992-93	The International Conference on Nutrition is organized around Food, Health and Care as a result of strong promotion for it at the SCN, despite strong resistance from other agencies. National Plans of Action after ICN were not greatly influenced. Jonsson leaves NY for post as Regional Director in South Asia.
1994	Internal evaluation in UNICEF reveals high recognition of the visual image and familiarity with Food, Health and Care, but poor understanding of the full strategy and how the framework links to the Triple A cycle.
1993-95	UNICEF/NY and Nutrition Section shift attention and resources to micronutrients, with many country offices following suit. Mid-decade goals contributes to this focus on pursuing achievable goals. Momentum is interrupted in the promotion of the framework and the nutrition strategy, training of staff, and use at country or community levels. Selected countries use it in selective ways (see India and Brazil experiences)
1998	Bellamy replaces Grant at UNICEF. The Triple A cycle and a modified conceptual framework become generic tools for all of UNICEF programming.

Annex 2

India case study: Correcting a food bias

In 1994 a window of opportunity opened in one state in India that was seized by a team of three policy entrepreneurs well-versed in the UNICEF nutrition framework, reinforced by a small network of strategic allies, and backed by the Secretary for Women and Children, leading to a politically and nutritionally significant change in program policy. The window was created during the planning for the re-design of the national health and nutrition program (ICDS), a program that has used supplementary feeding for decades and was, in the eyes of the Secretary, “ready for a change.” The core team, with the UNICEF framework in mind, highlighted the critical importance of the 6-18 month period for the incidence of growth failure (using recently collected DHS data) and promoted the “child care narrative” as a counter to the then-dominant “food narrative.” This evidence and narrative became influential in a series of consensus-building workshops with participants from ten states, that highlighted Care and Capacity-Building. In the process, two representatives from indigenous NGO’s emerged as energetic individuals willing to carry and promote the message to state government (in one state) that supplementary feeding should not play a prominent role in ICDS III. They were able to persuade government to implement ICDS III without supplementary feeding in one area of that state, a move that was possible in that area because systems of political patronage related to food aid had not yet been established in that area. Nonetheless, this decision is regarded as politically sensitive and was approved only for one pilot areas, such that the long-term and wider impact of the decision is not yet clear.

Annex 3

Brazil case study: capitalizing on consequences

The UNICEF framework was introduced into Brazil by public nutrition academics in the late 1980's and adopted by activists in the early 1990's, with the country office playing no significant role. Indeed, it was never called the “UNICEF framework.” One of its attractions to these groups was its simplicity (without being simplistic) that fostered a common language concerning food and nutrition problems. Another was that malnutrition and death were identified as manifestations of deeper problems in society, notably food insecurity, which provided a powerful motivational tool for civil society groups active in promoting food security. Using the framework and these powerful manifestations, these groups were able to advocate for actions at household, community and society level, as opposed to health actions targeted only at children. These same groups used the framework to guide the development of a national food and nutrition policy in 1998-99, that was formed in Brazil through an inclusive democratic process. Although the “manifestations and food security components” of the framework served the interests and agendas of activists committed to addressing food insecurity through social change, it was viewed as a threat by many in the health/medical community whose own narrative favored health interventions as the means for improving child health and survival. Thus, although the framework has not led to a consensus on the nature of child nutrition and health problems, it has broadened the societal debate about these issues and provided powerful ammunition for social activists.