



PROJECT MUSE®

## Hidden Hunger

Kimura, Aya Hirata

Published by Cornell University Press

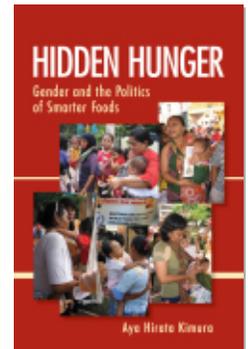
Kimura, Aya Hirata.

Hidden Hunger: Gender and the Politics of Smarter Foods.

1 ed. Cornell University Press, 2013.

Project MUSE., <a href="

<https://muse.jhu.edu/>.



➔ For additional information about this book

<https://muse.jhu.edu/book/43573>

Access provided at 27 Jan 2020 22:11 GMT with no institutional affiliation



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

---

## **BOUND BY THE GLOBAL AND NATIONAL: INDONESIA'S CHANGING FOOD POLICIES**

**Food and Nutrition for the Future: Increasing Productivity  
and Competitiveness of the Nation (Pangan dan Gizi Masa  
Depan: Meningkatkan Produktifitas dan Daya Saing Bangsa)**

—National Workshop on Food and Nutrition (Widyakarya Nasional  
Pangan dan Gizi) theme, 1998

**At the launching of the Healthy and Productive Female Worker  
Movement at the vice president's palace, vice president Try Sutrisno  
said that women workers need to increase work productivity,  
although their primary duty was to educate children and deal with  
household issues as housewives.**

—*Suara Pembaruan*, November 14, 1996

My stories of charismatic nutrients have focused on the international stage, touching on varying roles played by organizations and scientific experts. Now I turn to the question of how charismatic nutrients become local. The following four chapters anchor the global stories of micronutrients in a local setting: overall food policy (chapter 4), mandatory fortification (chapter 5), voluntary fortification (chapter 6), and biofortification (chapter 7) in the context of Indonesia. With relatively recent exposure to fortification and biofortification, Indonesia offers a suitable site for analyzing their dynamics. It would be easy to naturalize the growing influence of micronutrients in Indonesia. The country has achieved impressive economic growth and thus perhaps a focus on quantity is no longer necessary. However, I will scrutinize such naturalized assumptions about changes in food policy and point to the dynamic configurations of the diagnosis of, and solutions to, the food problem.

The stories of charismatic nutrients and the global turn to micronutrients bring up questions about their local translations: How did the global shift toward micronutrients in food policy play out in developing countries? How do

charismatic nutrients and nutritional fixes travel from the international realm to a developing country? Although “global” stories tend to be told as if they have automatic global reach, in reality the global articulates with the local in complex ways rather than in a linear, top-down fashion. The ontology of the “global” and “local” is also not so simple, and we need to complicate their social constructions as well. Rather than seeing the travel of micronutrients as a “norm diffusion” from the global center to the periphery, I draw on theories of “biopower” and its transnational mobilizations. As feminist theorist, Nancy Fraser points out, biopower is unbounded by national borders (2009). Fraser’s concept of “globalized governmentality” (125), and a similar concept of “transnational governmentality” by Ferguson and Gupta (2002, 981), point to the need for examining “a new multi-layered regulatory apparatus, which operates on a transnational scale” (Fraser 2009, 126).

Biopower that spills over national boundaries can be seen in the case of Indonesia in its overall food policy. On the one hand, the micronutrient status of Indonesians increasingly became of international concern. At the same time, Indonesians themselves also figured into the picture. However, the micronutrient turn in Indonesia was not simply a reflection of international consensus—calculations by local actors also mattered significantly. In this chapter I look at both international actors such as UN agencies, bilateral aid agencies, and international NGOs and the Indonesian domestic players. The increasing charisma of micronutrients in the 1990s in Indonesia was a product of such “global assemblages” (Ong and Collier 2004, 1). Global assemblages of players supporting micronutrients, however, had a particular structure. I began to realize this when I participated in a workshop on fortification in Jakarta in December 2004. An influential nutrition researcher told me about an “important” meeting on food fortification. I asked whether I could attend, and he kindly coordinated my participation. The meeting was held in a hotel in Bogor, a favorite getaway for urbanites from busy Jakarta. Entitled Workshop on the National Plan of Action on Food Fortification, the two-day meeting explored the direction of national policies on fortification. Interspersed with coffee breaks and buffet meals, the meeting consisted of several presentations ranging from “Principles of Strategic Plan of Action in Management” by the industry representative to “Suggested Strategy, Objective, Target, Output, and Outcome of the Future Fortification Program for Developing the National Food Fortification Program” by university researchers. The discussion primarily centered around technical issues: what to fortify (oil? sugar?) and how to collaborate with the food industry to promote fortification (cost? marketing?).

After watching numerous PowerPoint presentations—one was by a speaker from a flour mill industry who enthusiastically touted business-type strategic

planning by quoting ancient Chinese war strategists—I felt that malnutrition and hunger in the country were strangely distant and abstract. Indeed, the meeting was indicative of the global assemblage of micronutrient advocates: there were forty-five “experts” from government, universities, international organizations, and the food industry. While this group had both international and national representatives, glaringly absent were ordinary Indonesians who could share their stories of the cost of feeding their families and agonizing over ill children. The workshop, which was attended only by experts, domestic officials, and industry representatives, reflected the two powerful forces that shaped the micronutrient turn in Indonesia: the international policy trend and national development priority.

The micronutrient turn in Indonesia is a part of the transnational regime of truth production and discipline that facilitated new scientific and social logics for interpreting the state of health and nutrition in the country. What are the driving forces behind the rise of micronutrients in Indonesia, and who was made invisible in the policy debate? International as well as national priorities set the stage for the promotion of charismatic micronutrients in Indonesia, but *whose* priorities were they? In looking at, in particular, the micronutrient project for women workers, I question the construction of priorities that privilege productivity over justice.

## **Charismatic Micronutrients: The Indonesian Story**

In the 1990s, micronutrients came to the fore of nutrition policy in Indonesia. First, the government widened vitamin A capsule distribution. The earlier program of vitamin A capsule distribution targeted only children aged twelve to fifty-nine months, but in 1991 the government started to target pregnant women as well (de Pee et al. 1998). And in the late 1990s, the government further expanded the program to include postpartum mothers and infants of six to twelve months as recipients of capsules (Soekirman et al. 2005; Helen Keller International 2000). The government also drew resources from international organizations to conduct a variety of related research projects in the 1990s. For instance, it acquired funding from Helen Keller International and USAID to conduct several vitamin A promotion projects nationwide (Pollard and Favin 1997) and from UNICEF for a similar vitamin A project in Central Java in the 1990s (de Pee et al. 1998). The government and HKI collaborated on a project called ROVITA, an oral rehydration and vitamin A project that promoted vitamin A capsules and oral rehydration therapy among an additional 23,000 children in

Central Java. They also conducted social-marketing campaigns for vitamin A, promoting vitamin A capsules and vitamin A-rich foods among 40,000 children in one district in West Sumatra (Shaw and Green 1996; Soekirman et al. 2005).

In response to iodine deficiency disorder, experts replaced an earlier government program of injection with iodine capsule supplements in 1992 (Soekirman et al. 2005; Direktorat Bina Gizi Masyarakat 1994). In 1993, iodine capsules for people in twenty-six provinces were prepared, and social-marketing campaigns using TV, radio, and posters were conducted (Direktorat Bina Gizi Masyarakat 1994). The government also renewed its iodine fortification program and experimented with the iodization of water in four provinces (Direktorat Bina Gizi Masyarakat 1997) and with salt iodization, mandating the latter in 1994 via a presidential decree (Sunawang, Lusiani, and Schofellen 2000). Experts received funding from international donors such as PAMM, UNICEF, and CIDA for salt iodization (CIDA 2006).<sup>1</sup> One of the bigger grants came from the World Bank for accelerating salt iodization from 1996 to 2003 (Soekirman et al. 2005; Sunawang et al. 2000).

The government also accelerated efforts to reduce iron deficiency anemia. The IDA program in the 1970s targeted pregnant women, providing iron capsules every day for ninety days during pregnancy and for forty-two days during the postpartum period. But implementation was poor and the proportion of pregnant women actually taking these capsules was quite low. Since the late 1980s, the government had introduced many measures to increase this rate, such as increased supply and availability of supplements at each level of the health system, improved packaging, social-marketing campaigns, enhanced availability of program guidelines and protocols, and monitoring systems for anemia and supplement use.

In addition, the IDA program expanded its target population to include women of child-bearing age, “brides-to-be,” and teenage schoolgirls, encouraging them to take iron tablets regularly once a week (Kurniawan 2002). Experts were able to get endorsement not only from the Ministry of Health, but also from the National Family Planning Board (BKKBN), the Ministry of Education and Culture, the Ministry of Religious Affairs, and the Ministry of Social Affairs (Soekirman et al. 2005). Furthermore, in the late 1980s, the government started programs to specifically address female workers’ IDA, and in 1992, the project received renewed emphasis. The Ministry of Health, the Ministry of Manpower, the BKKBN, the State Ministry of Women Empowerment, the Ministry of Education and Culture, and the National Development Planning Board (BAPPENAS) started a long-term anti-anemia strategy for female workers. In 1996, the Ministry of Health and the Ministry of Manpower issued a decree on reducing anemia in female workers (Direktorat Bina Gizi Masyarakat 1996).<sup>2</sup>

Similar to the global embrace of fortification, Indonesia also saw increasing official commitment to fortification. Fortification was first mentioned in the nation's fifth five-year development plan in 1989 (Repelita V, 1989–93),<sup>3</sup> and the government finally decided on salt iodization and wheat flour fortification in the late 1990s. Wheat flour fortification, which was one of the programs to combat IDA, is discussed in detail in chapter 5. A fortified baby food program was also begun at this time, which is discussed in chapter 6.

The government's and experts' data-collecting activities relating to the food problem also indicate the growth of interest in the micronutrient status of the population in the 1990s. It may seem easy to gauge a nation's nutritional situation, but in actuality it is no simple task. For a long time, the Indonesian government relied on data on food production (availability of protein and calories) rather than on the nutritional status of the population per se. The nutritional situation was estimated based on a "food balance sheet" (*neraca bahan makanan*), which was a set of data comprising domestic food production, exports and imports, availability, food loss, as well as human consumption (Arifin 1993, 163). Another frequently used way to infer the nutritional status of the country came from a household food intake survey conducted as part of the National Social Economic Survey (SUSENAS). It asked respondents to recall what they ate in order to measure food intake by households. This survey was started in 1963. In the 1980s, the government sought funding from USAID to add child anthropometry data with the hope that this would be a more direct measurement of national nutritional status. A national survey called the Integrated Nutrition Survey started to integrate measurement of the weight of children under five years of age into SUSENAS (Surbakti 1987; 1994). The data collected by these methods was perhaps useful for assessing the *macronutrient* condition of the population, but it could not estimate reliably the micronutrient situation. The national prevalence of micronutrient deficiency was long unknown. Estimates of the prevalence of vitamin A deficiency, iron deficiency anemia, and iodine deficiency disorder were not available, and it was not until the 1990s that data gathering intensified. For VAD, there was one national survey in 1977 called the Nutritional Blindness Survey, conducted in collaboration with Helen Keller International. But this survey focused on xerophthalmia rather than VAD in general. In 1992, at the urging of scientists and health bureaucrats who wanted to know the status of VAD in the country, the government conducted another survey, the National Xerophthalmia Survey. For IDA, the government conducted a survey in 1986 as part of the National Household Health Survey (Survei Kesehatan Rumah Tangga or SKRT), which provided the first national data on hemoglobin levels of pregnant mothers. The government tried to institutionalize this IDA assessment, and so the two

following SKRTs, in 1992 and 2001, measured hemoglobin levels of pregnant mothers, reproductive-age women, and children under five years old. For IDD, the National Goiter Survey was conducted once in 1980, but there was no follow-up for a long time. In the 1990s, in response to the renewed attention to IDD, the government conducted a series of national surveys in 1990, 1996, 1998, and 2003 (Azwar 2004). In short, national data on food availability and child weight existed from the 1960s, but it was only in the 1990s that data on micronutrient deficiencies began to be collected with any regularity. Before that, national data on vitamin A deficiency, iodine deficiency disorder, and iron deficiency anemia was quite limited.<sup>4</sup>

Along with data, another key development was in the use of the term “micronutrient” itself. Although Indonesians had translated English words such as “vitamin” and “protein” into Bahasa Indonesia, the official language of Indonesia, the word, “micronutrients” did not have an Indonesian counterpart until the early 1990s. In my interviews with Indonesian experts, it emerged that the term’s translation was first discussed in bureaucratic meetings in 1993, when the government nutritional experts were debating the nutrition policy for the coming five-year plan (Repelita). Many Indonesian nutrition experts, both at universities and governmental agencies, had been educated in the West and were aware of the global turn toward micronutrients. They realized the need for an Indonesian word for the concept, and after some discussion, they agreed to the translation *gizi mikro*, which literally means “micro” (*mikro*) “nutrient(s)” (*gizi*). Some thought that this phrase might mistakenly give the impression that these nutrients were unimportant because *mikro* connotes something small.<sup>5</sup> Nonetheless, *gizi mikro* became widely accepted in the lexicon of Indonesian nutritional science.

This new term, *gizi mikro*, has had an interesting social function by providing a new category that has reconfigured and extended technoscience networks. Researchers started to identify themselves as doing analysis on *gizi mikro* instead of saying, for example, that they do research on vitamin A or iodine. The term *gizi mikro* also engendered a bureaucratic reorganization. The Ministry of Health decided to create divisions of micronutrients and macronutrients (Gizi Mikro and Gizi Makro) under the Directorate of Community Health.<sup>6</sup> This process facilitated communication with international actors, who then shared an identity as micronutrient researchers. It also created a space for Indonesian researchers who were empowered by the growing global charisma of micronutrients and were capable of speaking on behalf of the related global consensus.

With expanded policy programs, improved data sets, and the lexical entry, micronutrients began to figure centrally in Indonesian food policy in the 1990s.

Paralleling the global trend that we have seen in earlier chapters, micronutrients came to exert charisma in the Indonesian food policy community, attracting funding, modifying the institutional configuration of bureaucracy and scientists, and shaping policy interventions.

## Synchronizing Food Policies

How do we explain this Indonesian turn to micronutrients? It would be difficult to simply say that Indonesia “uncovered” hidden hunger in the 1990s. There had been multiple studies in Indonesia, albeit on a small scale, that indicated the prevalence of nutrient deficiencies since the 1960s (Martotmodjo et al. 1972, 1973, 1980; Karyadi 1973a; Permaesih, Dahro, and Riyadi 1988; Dahro et al. 1991). It would similarly be difficult to attribute the shift to the eradication of problems of macronutrition or protein-calorie-malnutrition. Rice self-sufficiency was achieved in 1984, but it has not been maintained. Indonesia still faces the problem of lack of food and low-caloric intake. Scientific and technological advancement alone cannot explain the charisma of micronutrients at a particular historic point, and social factors ought to be considered.

From the above description, it is undeniable that international organizations played a significant role. From the World Bank’s iodine project to UNICEF’s vitamin A project, many of the micronutrient projects in Indonesia were funded or prompted by UNICEF, USAID, WHO, and other international organizations. Nongovernmental organizations based in the United States, such as Helen Keller International, also have played a critical role in directing more resources to micronutrient-related projects. As we have seen, there have been many international agreements that have aspired to tackle global hidden hunger, and they have required local sites and willing collaborators to realize their claim of having a global reach. Project financing, training, workshops, conferences, and pilot studies are all part of an important path through which the global discourse finds concrete points of engagement.

In addition, international organizations set up local counterparts to the international initiatives, which facilitate the global to local translation. For instance, the local Indonesia Fortification Coalition (Koalisi Fortifikasi Indonesia or KFI) backed fortification in Indonesia. The KFI includes many influential Indonesian experts in nutrition and food technology, government officials from the Ministry of Health and the Ministry of Trade and Industry, and business interests such as the Chamber of Commerce’s Division of Food and Beverages.<sup>7</sup> Its genealogy is telling of the influence of international organizations. In 2000, the Asian

Development Bank organized a conference called the Manila Forum to promote fortification in Southeast Asia (ADB 2000b). It was on the recommendation of the Manila Forum, and with the funding from UNICEF, that the KFI was established in 2002. The KFI subsequently has served as a nongovernmental local liaison for international donors that are interested in promoting micronutrient projects in Indonesia.

The presence of cosmopolitan Indonesian food and nutrition experts also has eased the journey of micronutrients to Indonesia. Local groups such as the KFI tend to include Indonesians who are fluent in English, many of whom have academic degrees from American or European universities. From the perspective of international organizations, they are easy to communicate with, not only because of their fluency in English but because they share the same kind of “development” language and an understanding of global trends, including the trend toward micronutrients. These Indonesian experts are well aware of current beliefs and practices in international nutrition and nutrition-related development programs around the world. There is little need to preach to them about the importance of micronutrients or the seriousness of micronutrient deficiencies.

Global-local interactions are not clear-cut. Indonesian experts and organizations embody “the local” vis-à-vis the “global,” and having such local partners is important in that local consultation, participation, and collaboration is valued in international development. These local experts are not merely transmitters of global norms, a passive node through which the global “epistemic community” channels its consensus after it is already formed—as understood in world society theory. Rather, they are a kind of hybrid group that also participates in the formation of the global consensus and trends. Many nutritional studies on micronutrients were conducted in developing nations, with Indonesia being one. The most influential study of vitamin A, the Aceh study, by Alfred Sommer (discussed in chapter 2) took place in Indonesia. Dutch nutrition researcher Saskia de Pee and her colleagues (1998) conducted many vitamin A–related projects in Indonesia as well. These foreign researchers needed government approval for conducting research, institutional sponsors in Indonesia who would agree to write letters to relevant agencies, translators, and other local staff to coordinate the projects’ logistics. Many of the cosmopolitan Indonesian researchers also participated in international nutritional organizations that have influenced the direction of global discourse. Muhilal and Darwin Karyadi,<sup>8</sup> both of whom have led Indonesia’s most prestigious nutrition research center, the Center for Research and Development of Nutrition and Food (Puslitbang Gizi), have published in Western nutrition journals. Many of the Ministry of Health’s nutrition experts studied abroad and were collaborators in Western researchers’ nutrition studies.

Soekirman, who was the president of the Indonesian Nutritionist Association (Persatuan Ahli Gizi Indonesia or Persagi), perhaps best embodies this hybridity. He studied initially at the Nutrition Academy in Indonesia and then attended Cornell University in the United States for his graduate degrees in international nutrition. He served in many influential organizations in Indonesia, most notably at the National Development Planning Board. Simultaneously, he has been active in international nutritional circles. When I interviewed him in his office in Jakarta, which was littered with policy reports from international organizations, he said of his achievements: "I was president of nutrition societies. Not only in Indonesia, but also in Asia and internationally. So I have been very much linked with the world. At any international nutrition society, they know me. I am a director of ILSI Southeast Asia. I was an expert adviser to the UN Subcommittee on Nutrition in Geneva. I attended every annual meeting. So we are very close to international scientific groups." Rather than being a passive conduit of an externally formed global consensus, Indonesian experts like Soekirman are part of the global force.

Furthermore, while international donors have sought to implement projects in Indonesia, we should not consider Indonesians as merely manipulated by international actors. Indonesian experts have been willing collaborators in international endeavors. International projects, research collaboration, conferences, and workshops are important sources of funding and prestige for Indonesian researchers and bureaucrats. They are acutely aware of the need to be attuned to international discursive changes so as not to miss new opportunities for funding and prestige for themselves and for their organizations. The ebb and flow of foreign aid, whether bilateral or multilateral, public or nongovernmental, is ingrained in their lives and careers. Development projects tend to move from one theme to another, making different issues the poster child at different times. In one year it might be "democratization," while in the next it might be "civil society." For people dealing with international organizations, the pressure to navigate and adjust well to these changes in donor preferences is nothing new. They would rather harness this flow of change than become victims of it. If international organizations have thought that they were persuading these locals to take up the next big thing in development, Indonesian experts have been similarly astute in being persuaded and receiving funding, international travel, and prestige.

Ana Tsing has argued that "global forces are themselves congeries of local/global interaction" (2004, 3). International trends in nutrition have found Indonesian expression through such congeries of the local and global. Through the network of international organizations and their Indonesian collaborators, the importance

of micronutrients has been disseminated throughout Indonesia. These local and global actors, with differing but overlapping commitments and ambitions, have shaped the direction of Indonesian food policy.

## **Resonance with a Development Paradigm**

In the context of modern developing countries, the nation's relationship to technoscience is shaped by its project of nation building, and in particular the mandate for the state to "develop" itself. From the atomic bomb (Abraham 1998) to nuclear power (Hecht 2000) to the megatelescope (Abraham 2000) projects, science and technology represent the "epitome of and metaphor for the modern" (Abraham 1998), constituting what "underdeveloped" countries should strive for. The quest for technoscience capability is thus embedded in nation states' understanding of modernization and development. Nutritional science is part of this. Nutritional science has also provided a useful instrument for states as a basis for welfare intervention (Kjaernes 1995), driven by the desire to secure a cheap and healthy labor force (Aronson 1982; Turner 1982) and by military needs to produce healthy soldiers (Burnett 1979; Levenstein 1993). Policies on nutrition, food, and bodies are not merely to be considered as humanitarian in their intentions. Rather, as in other policies, they aid certain types of social engineering by the modern state. An inseparable part of food policy is the state's logic in pursuing a particular shape of citizenry and nationhood. Therefore, to consider Indonesia's micronutrient turn in relation to the global is to tell only half of the story. Besides the alignment with global trends as described, Indonesian food policy also needed to fit with aspirations of the Indonesian state. Management of bodies of the nation is an integral dimension of development, and to understand the power of micronutrients in Indonesia, we need to examine the relation between national development priorities and food policy.

I have discussed how the charisma of micronutrients, and in particular its accompanying nutritional fix, fortification, has had a strong resonance with neoliberalism. This can be seen in the context of Indonesia. The important political context of the micronutrient turn was the shift in overall development policy from state centered to market based in the 1990s. Far from static, dominant thinking on what a nation has to do to "develop" and what "development" means is subject to constant change. Indonesian economist Thie Kian Wie provides a useful overview of shifting development paradigms in Indonesia. He observes that from the 1960s to the mid-1970s, Indonesia's national priority was recovery from the economic turmoil caused by political upheaval. The period after 1974 was shaped

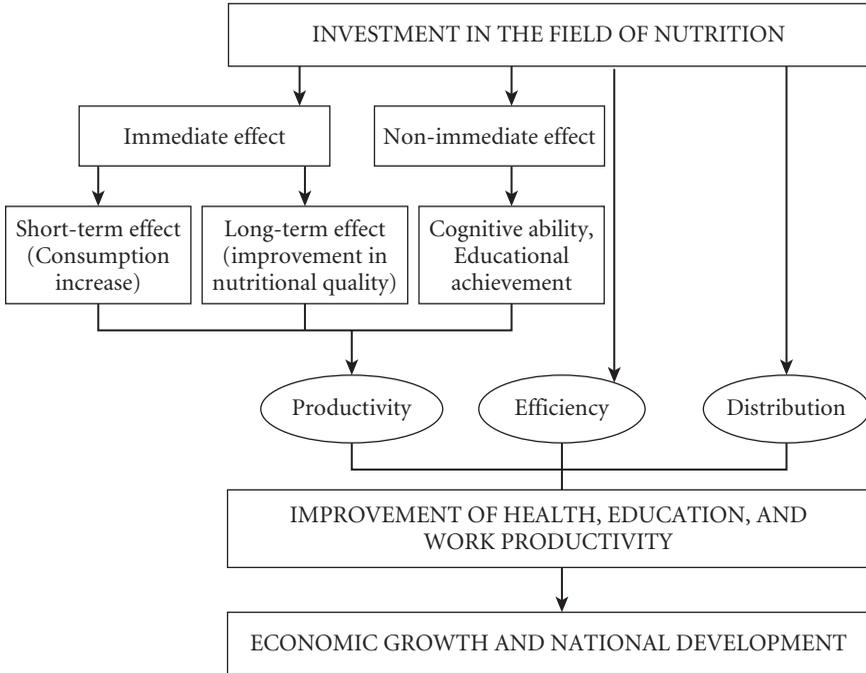
by a major oil boom that fuelled rapid economic growth. Development planning became centered on building infrastructure and nurturing domestic industry by import substitution and a protectionist trade policy. When the oil boom went bust in the 1980s, the government changed gears and turned to deregulation, liberalization, and an export-led growth model of economic development (Wie 2002). In other words, since the 1980s, Indonesia increasingly took a neoliberal model of national development.

With this neoliberal shift, the previously dominant food policy programs—increasing food production via agricultural modernization and reducing mouths to feed via population control—came to be considered cumbersome and antiquated as they relied on state subsidies and were based on top-down bureaucratic structures. The necessary transition from such a state-heavy approach was envisioned as “from Green Revolution to Market Revolution,” by the head of the Office of State Minister of Food Affairs and BULOG (Hasan 1993, 16).

Under the “market revolution,” corollary changes in social policies were also necessitated, and accompanying the neoliberalization in economic policy was the new mantra of “human resource development.” The improvement of human resources to create a competitive labor force was officially endorsed in Indonesia’s second long-term development plan (Pembangunan Jangka Panjang II, or PJP II, 1994–2019) as the national goal (Ministry of Education and Culture n.d.). People now were the essence of the nation’s survival in the global marketplace, and the prosperity of the New Order regime was to be built on an able human resource pool.

In the field of nutrition, this new economics of people brought the economization of nutrition that was discussed in chapter 3. Mirroring the international situation, economization of nutrition has also compelled Indonesian food and nutrition experts to use economic frameworks in diagnosis and prognosis of food problems. No discipline could afford to be irrelevant to national development, and nutrition experts refined their framing of nutrition and the food problem to fit the emerging view of nutrition. Consequently, the traditional etiological emphasis gave way to a productivity focus. Many iterations can be drawn between nutrition and the new development priority (see fig. 4.1). The key message is that nutrition contributes to human resource development and hence ought to be considered as an investment.

It was in this context of economization of nutrition that micronutrients emerged as a key link between nutrition and national development. This is not to say that there was a natural fit between micronutrients and the new development priority, however. Rather, experts subtly shifted their framing of micronutrient deficiencies from being a survival issue to a competitiveness issue, highlighting their impacts on cognitive functioning, work capacity, and productivity. We



**FIGURE 4.1.** Illustration of the link between nutrition and development.  
 Source: Jalal and Atmojo 1998, 923; my translation.

can see this shift in the new representation of various micronutrient issues. For instance, iron deficiency anemia, departing from the previous representation as a particular medical condition (anemia), received renewed attention in the 1990s as a work-productivity problem (WHO 2001b). Often cited as the justifications for IDA prevention in the 1990s were impacts on labor performance, including a study on road construction workers that found that anemia was closely associated with poor work performance (Basta et al. 1979; Karyadi 1973b; Husaini, Karyadi, and Gunadi 1981). Refashioned as a matter of productivity, IDA became a problem of loss to the national economy.

Similarly, experts were able to renew attention to iodine deficiency disorder in the 1990s by linking it with mental and intellectual impairment. In the earlier period, IDD was called “endemic goiter” rather than “iodine deficiency disorder.” That is, the consequence of the deficiency was seen as the swelling of the thyroid gland (goiter). Now, recategorized as IDD, emphasis became on its influence on intellectual ability. It was only in Repelita V (1989–93) that the term “iodine deficiency disorder” was used with its emphasis on mental impairment rather

than goiter. Placing IDD differently, Repelita V started to construct and justify the importance of tackling the IDD problem as one of protecting children's intellectual ability, and Repelita VI continued this theme.<sup>9</sup> Compelled by the new emphasis on human resource productivity, interpretation and representation of micronutrient deficiencies became significantly modified.

In addition to the contribution to human resource development, experts framed micronutrient deficiencies as fitting the doctrine of less government. Fortification was constructed as the most obvious market-friendly policy in the nutritional field. Fortification satisfied the two-pronged demands of the new development paradigm: to achieve human resource development by using a market mechanism. The link between fortification and Indonesia's new national priority was made clear in the words of the primary fortification promoter from the Office of State Minister of Food Affairs in 1997, who explained fortification as follows:

The meeting of economic leaders of APEC in Bogor in 1994 decided that trade and investment in the region needs to be liberalized by 2010 for developed countries and by 2020 for other APEC countries. This liberalization cannot be avoided, especially after ratification of WTO in 1995. For the implementation of WTO agreement the most important is human resources. Even now, the impact of liberalization is increasingly felt. . . . Moreover, AFTA implementation (in 2003) is only six years from now. Because of that, the meeting on Food Product Fortification to Improve Human Resource Development is very important. The issue of human resources is a priority goal in PJP II. (Natakusuma 1997, 1; my translation)

Note how Natakusuma links economic globalization to the necessity of human resource development and to fortification. At the National Workshop on Food and Nutrition (Widyakarya Nasional Pangan dan Gizi), he delivered a speech entitled "Food Fortification Strategy," in which he underscored the link between fortification, human resource development, and national development, saying that "in the current competitive age, quality of human resources is the key factor for development." In the eyes of the state with its neoliberal development plan, human resource development was the first layer of justification for fortification; that it could be achieved by market mechanisms was an additional appeal.<sup>10</sup>

The parallel between development paradigms and food and nutrition policy that I have described is not only a matter of experts' strategic positioning vis-à-vis the state development paradigm. They are also severely bound by institutional mechanisms to strictly synchronize their activities with the development

paradigm. In the daily conduct of bureaucratic administration and academic research, nutritional experts have had to act within the confines of overall development goals. In Indonesia, national development was hierarchically structured with the Repelita on top, designed to align activities of the government at all levels. Repelita was a broad policy framework made every five years, which established goals and objectives for national development in the given period. After its approval by the parliament and the president, governmental agencies were asked to formulate programs and the accompanying budget in line with Repelita. The agencies' programs then had to be approved by the powerful National Development Planning Board, which made sure that these programs fit the overall theme of Repelita. Stipulating priorities of the nation in order to effectively mobilize its available resources for a unified goal, it set directions for sectoral activities. Changes in the national development paradigm were meant to be transmitted to the health, food, and nutritional sectors.

Academic research activities also had to align themselves with national development goals. The contents of Repelita and the budget approval process worked as a strong force that shapes the agenda for research in Indonesia. For instance, the central site of nutritional research in the country is the Center for Research and Development of Nutrition and Food under the Ministry of Health,<sup>11</sup> and the consistency of the Center's research agenda with Repelita was ensured by its internal review team and a review process at the Ministry of Health.<sup>12</sup> Research that did not have direct policy contributions was discouraged. The personal promotion of scientists at the Center was also tied to their contributions to the goals of Repelita. At the university level, too, the contribution of research to Repelita's goals was key to the survival of researchers in terms of the availability of funding. For instance, two major funding sources for nutritional scientists—Riset Unggulan Terpadu (Integrated Research of Excellence) and Hibah Bersaing (Competitive Grants)—evaluated research proposals on their relevance to Repelita's objectives.<sup>13</sup>

The Widyakarya Nasional Pangan dan Gizi has been another way that the development-nutrition linkage has been generated and ascertained. It is a meeting held in conjunction with the planning phase of every Repelita. Since its inception in 1969, Widyakarya has become an important event for showcasing the alignment of food and nutrition policy with overall development goals (Soekirman et al. 2003). To emphasize the meeting's importance, the president and ministers make appearances and typically give speeches about the importance of national development. Conceived as the expert body that gives input to Repelita, Widyakarya is tasked with creating a synergy between national development and food and nutrition sectors.

Nutritional and food policies and research agendas are tightly controlled to fit with the overall direction of national development. At the same time, nutritional scientists elucidate aspects of the food problem that match development mandates, since the alignment with national development is the key to securing funding, legitimizing one's discipline, and protecting institutional survival. Fashioning their programs as market-based ways improve the nation's "human resources," proponents of micronutrients aligned themselves with the development paradigm of the 1990s.

## Women Workers as Resources

In November 1996, the vice president established the Healthy and Productive Female Worker Movement (Gerakan Pekerja Wanita Sehat dan Produktif).<sup>14</sup> This was a national campaign to encourage companies to distribute iron folate pills to female factory workers to reduce IDA (Kurniawan 2002). The government published the "Guide for Fulfilling Workers' Nutrition" (*Pedoman Kecukupan Gizi Bagi Tenaga Kerja*) to help improve food for workers at offices (Direktorat Bina Gizi Masyarakat 1997), took blood samples from female workers and mandated that companies give them iron supplements once a week for sixteen weeks per year (Kosen et al. 1998).

A seemingly innocuous public health program, this "movement" nonetheless reveals calculations on women's health within the economized logic. The movement was nominally a public health campaign, but it was simultaneously motivated by the need to cultivate a productive and efficient labor force for the purpose of national development. In fact, this was clearly articulated in the goal of the movement; according to the government, the movement's goal was "to increase awareness of the owners and managers of companies and developers to increase the health, nutrition, and productivity status of female workers in the framework of competing in the globalization era" (Direktorat Bina Gizi Masyarakat 1997, 46).

The government's seemingly benevolent concern for women's health needs to be juxtaposed with its repressive labor policy. The Indonesian government strictly managed labor under the doctrine of Pancasila Industrial Relations, which dismissed labor disputes as culturally unsuitable to Indonesia, and through a state-sanctioned labor federation called All-Indonesia Workers Union (Serikat Pekerja Seluruh Indonesia). Most workers were unable to organize or bargain, and workers risked heavy repression by the military and security forces if they tried to do so (Hadiz 2000). When Indonesia liberalized its business environment to attract foreign investment in the 1980s, the government wooed global capital with the

promise of cheap and well-controlled labor (Spar 1996). Docile workers were crucial for national development.

The paradox comes into sharp focus with female labor. Women workers became the backbone of the national economy as Indonesia came to depend on export-oriented manufacturing after the bust of the oil boom in the 1980s. Replacing the petroleum industry as the core of Indonesia's economy were labor-intensive industries such as textiles, garments, and footwear, 80 percent of whose workers were women (Hadiz 2000; Tjandraningsih 2000). For many emerging Asian countries, female labor was important as the basis for export industrialization, but Indonesian women were positioned at the bottom of the regional economic hierarchy, providing cheap labor to neighboring countries as domestics or factory workers run by Korean or local subcontractors (Ong 2011).

Working conditions for these Indonesian female workers were abysmal. They were among the lowest paid workers in Asia. The Indonesian legal minimum wage was two dollars a day in the 1990s, which was not enough to cover basic needs (and furthermore was sporadically enforced) (Spar 1996).<sup>15</sup> Female workers typically received wages even lower than their male counterparts. Living and working conditions were also poor. For instance, a survey of female factory workers found high rates of intestinal parasites indicative of an unsanitary environment (White 1990). Moreover, these workers suffered from strict surveillance. Ong reported in 2000 that control and surveillance of female workers was found in "the provision of food, in granting or withholding of permission for menstrual leave, in the pressure for family planning and in physical confinement imposed during work hours," as well as "timing visits to the toilet, and using the excuse of having to verify requests for menstrual leaves to conduct body searches" (63).

The repression against women workers was most emblematic in the murder of a woman labor activist, Marsinah, in 1993. She was a twenty-five-year-old factory worker and labor activist in East Java who was tortured, raped, and murdered. The government blamed the factory management and arrested a few people, but they were found not guilty after a sham trial. An independent investigation by the Indonesian Legal Aid Foundation found strong evidence that the military was involved in the murder. As Rachel Silvey observes, the military "intended to terrorize women workers and discourage them from participating in labor activism" (2003, 138).<sup>16</sup>

As I have shown, micronutrients were wrapped around the concept of human resource development, but the story of the Healthy and Productive Female Worker Movement reveals underlying biopolitical calculations that shaped its interpretation. In theory, the concept of human resource development did not limit itself to a narrow range of issues that had direct economic return but had a theoretical breadth that included political participation and elimination of

poverty and illiteracy. Yet the government's interpretation avoided dealing with any structural injustices. Underdevelopment, not injustice, was the problem for the government. The "human resources" of the country were to be *developed* (and exploited) but not *protected* for their basic rights, such as the right to organize, to bargain, and to have a livable minimum wage. Micronutrients provided a depoliticized window of opportunity, avoiding the possible radicalization of politics. In other words, micronutritional interventions helped the government to manage "populations in relation to the demands of world markets" (Ong 2002, 235) rather than managing the market in relation to the demands of the workers. As part of investments in the name of people's health and in the interest of global and national capital, micronutrient projects helped exacerbate the biopolitical control over the bodies of Indonesians.

## Health without Justice

I have explored the complicated formation of political and social alliances that has propelled the charisma of micronutrients in Indonesia and have pointed out two "translations" that are important in this network of alliances. First is the global to local translation. There was global hype about "hidden hunger," and there emerged a network of experts and organizations that worked to translate its mandate into local policy in Indonesia. It was not an easy task, as the "global consensus" does not have automatic power to cause sweeping change in a given locale. International organizations and NGOs cultivated links with Indonesian experts and bureaucrats through involving them in research projects, establishing counterpart NGOs, putting on workshops and conferences, and through project financing. Simultaneously, the engagement with the "global" was also sought by Indonesians. Attuned to the ebb and flow of global development discourses, many Indonesian experts were eager to take part in this micronutrient turn, which they rightly saw as a way to establish or strengthen their connection with the cosmopolitan world and to increase resources that were so lacking within the country.

In addition to the global to local translation, another level of translation had to be performed. This was a translation of the meaning of micronutrients and micronutrient deficiencies to fit better with the development discourse of the day. Being a part of "national development" is important for the nutritional field, given its historic marginalization. Population control and agricultural sectors had occupied the top of the national priority list, drawing strong political commitments and government resources. To claim its space in the development apparatus, the nutritional sector had to construct itself as contributing to

national aspirations. Therefore, translation of the social meaning of micronutrients to fit with the contemporary development paradigm was an important institutional and personal investment for Indonesian nutrition experts. As the development paradigm shifted in a more neoliberal direction, Indonesian nutrition experts danced this intricate dance well, refashioning micronutrients as a matter of “human resource management” and a “market-based” solution that was nationally (and of course globally) appropriate. It was in this space between globalism and developmentalism that *gizi mikro* emerged as the key term for Indonesian policy.

While food policies were made doubly accountable to the global and the national, they were not made accountable to Indonesian citizens. While experts focused on hidden hunger, more obvious hunger had not disappeared. In fact, one might say that the government’s focus on micronutrient deficiencies was misplaced in the face of the recurrence of obvious forms of hunger. News about protein-calorie malnutrition in the eastern regions of the country in 2005, with shocking photos of the obviously hungry, defied the “hidden” hunger framework that was dominating Indonesian food policy. This was a wake-up call to many food policy experts in the country (TEMPO 2005a; TEMPO 2005b; GATRA 2005). When I asked about this news, many Indonesian nutritional experts said that they were “shocked” to see such obvious forms of malnutrition in the country. The presence of such visible malnutrition was something that should belong to the past. What made the condition itself so “hidden” to the experts and the public is that it occurs among the most marginalized of the Indonesian communities, such as the children of refugees from the former East Timor (Jakarta Post 2009; Fointuna and Maryono 2009).

As was clear at the workshop in Bogor discussed at the opening of this chapter, there was no grassroots participation in food and nutrition policymaking. While food policy experts were busy listening to their international peers and fine-tuning their research proposals to fit the development paradigm, they were not questioning what had fallen outside the international development discourse or the development paradigm of the country. The Healthy and Productive Female Worker Movement in the 1990s instructed female workers to take iron tablets to combat anemia. These women were an engine of the celebrated Indonesian economic development. The Suharto regime tightly controlled unionism and successfully attracted foreign direct investment by keeping an inexpensive, docile labor force. But the working conditions were bad and subject to growing international and domestic criticism and global antisweatshop activism. If asked about how to help their anemia, female workers probably would have said, “Give us decent wages and pay us for overtime if you are worried about our anemia.” Instead, it was iron tablets that experts decided to give

them, thus obfuscating the problematic working conditions and the development paradigm that prioritized economic growth over people's welfare.

Micronutrients came to be the focal point of the definition of the food problem in Indonesia in the 1990s. Such a shift was not propelled by demands from the hungry themselves. It was the international and national experts who saw and sought micronutrients as the best way to address food policy. The result was that efforts were focused on synchronizing Indonesian food policy with international scientific consensus and national development priorities but not with the needs of the poor and the marginalized, who were not heard.