



Report on a nutrition and household food security project in Viet Nam

Kristien Vliegen is a nutritionist and an Associate Professional Officer in FAO's Food and Nutrition Division. She worked in Viet Nam as Technical Officer for the Household Food Security for Nutrition Improvement Project described in this article.

During the 1996 World Food Summit, governments agreed that "Food security exists when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO, 1996). Programmes that link nutrition education, home gardening and livestock production can have a sustainable positive impact on child nutrition and household food security.

Nutrition situation in Viet Nam

In rural areas of Viet Nam, approximately 45 percent of children and 40 percent of women are malnourished. In order to improve nutrition and enhance household food security, a three-year pilot project was

carried out from March 1997 to June 2000. With a contribution of US\$1.8 million from the Australian Agency for International Development (AusAID) the project sought to validate an approach for tackling child malnutrition in the countryside.

The project combined home gardening to provide both food and income with nutrition education for the families of malnourished children under five years of age. The experience has provided useful lessons for FAO and others working to improve household food security. It demonstrated some of the ways in which nutrition can be incorporated into wider rural and area development programmes.

Developing the model

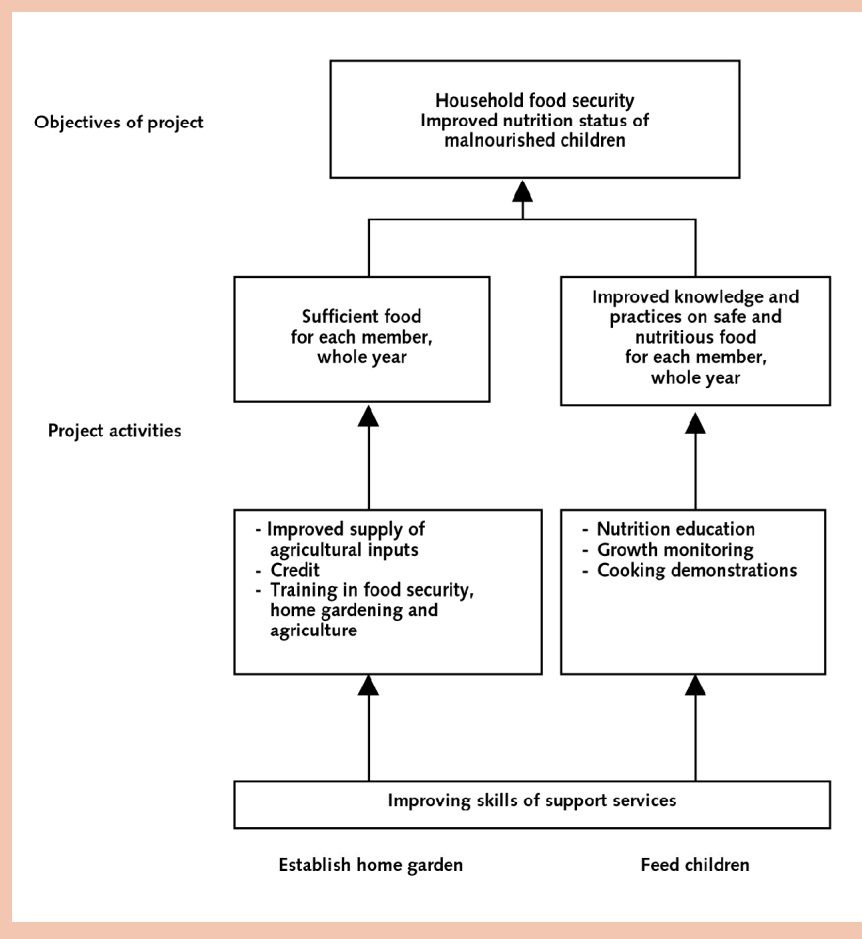
In 1997, the Household Food Security for Nutrition Improvement Project was set up by Viet Nam's Ministry of Agriculture and

Rural Development (MARD), in collaboration with the National Institute of Nutrition (NIN) and FAO. The idea was to integrate nutrition education with the transfer of small-scale agricultural technology to food-insecure households with malnourished children. The strategy was to give training and very small grants to selected households, which were clearly identified and closely monitored. The home gardens were established with a simple and low-cost approach. It was found that, when the households understood the nutritional and economic benefits of home gardening, the impact of establishing and utilizing productive home gardens was larger. These efforts gave the household members a sense of being involved in a programme and an incentive to improve child feeding practices.

The project worked at the national, provincial, district and communal levels to reach its primary beneficiaries and to implement its activities. Some 12 000 poor households, each with at least one young malnourished child, were assisted. In addition, 1 800 community workers and district-, province- and national-level staff of the agriculture and health ministries and the women's union were trained. The project was operational in eight provinces of Viet Nam: Phu Tho province, Thanh Ba and Ha Hoa districts; Nam Dinh province, Vu Ban and My Loc districts; Binh Dinh province, Tuy Phuoc and Phu Cat districts; Binh Thuan province, Bac Binh and Ham Thuan Nam districts; Quang Binh province, Le Thuy, Quang Ninh, Tuyen Hoa and Minh Hoa districts; Quang Ninh province, Hoanh Bo district; Thanh Hoa province, Lang Chanh and Hau Loc districts; and Gia Lai province, Mang Yang and Kon Chro districts. Figure 1 illustrates the project's objectives and activities.

The approach taken by the project, of establishing province and district teams drawn from existing government staff and providing them with additional specialist training and very limited incentives, could be used for other rural household improvements. Limited incentives were also given to commune networks.

FIGURE 1
Household food security model



An independent evaluation of the project concluded that it was cost-effective, innovative, adaptable and appropriate, although both cost-efficiency and sustainability could have been further enhanced with greater use of the existing commune infrastructure of staff and collaborators.

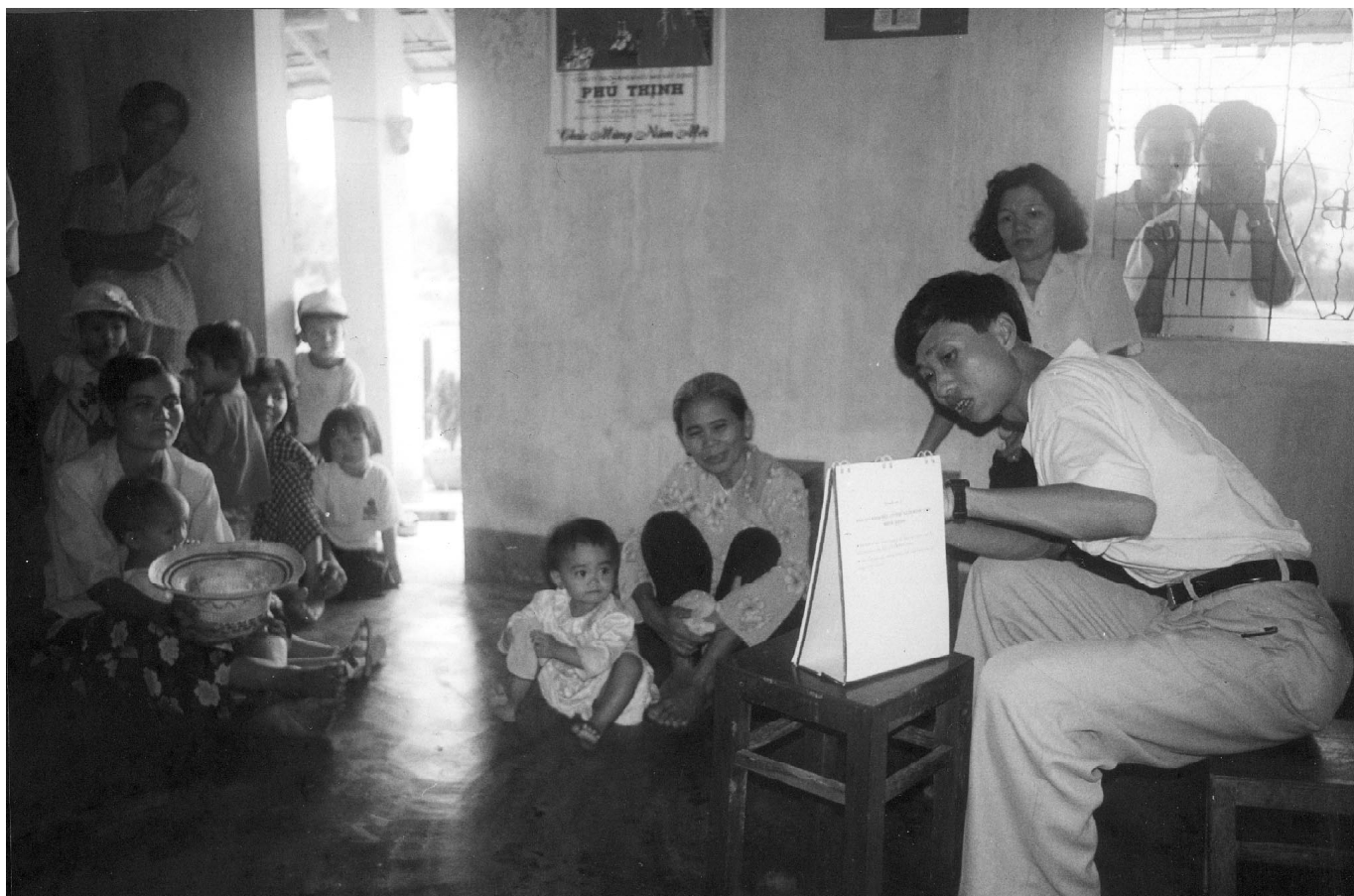
Assessing the model

A survey was carried out to identify changes in the target households' knowledge of nutrition and dietary practices. The baseline and follow-up surveys were conducted after a seven-month interval in 1999. In addition, monthly growth monitoring was carried out during the study. The samples included 40 children from target households in the project communes (Nam Dinh and Binh Thuan provinces) and 20 children in a control commune (Nam Dinh province). During

each home visit, an in-depth semi-structured interview was conducted. Standard questions were asked in order to determine the degree of malnutrition, the frequency of feeding, the food products given, changes in feeding practices, awareness of nutritional status and weight of the child, understanding of tools (e.g. the growth chart) and understanding of what constitutes a nutritious meal. The results of the interviews are shown in Figures 2, 3 and 4. Although the sample was too small to be statistically significant, it provides quantitative indications of the impact of the project.

Mothers' knowledge of nutrition

As well as weighing the children monthly and visiting their homes, the project collaborators gave the mothers additional nutrition information. The main topics



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A farm household's experience

Farmer Thi, his wife Thanh and their three-year-old daughter live in Chinh Cong commune in Phu Tho province. Their story is typical of households participating in the project: "Before, we worked in the rice fields all day long. Now we have learned to organize our time better. Besides working in the fields, we work in our home garden and, at the same time, look after our daughter. In the beginning, neither our

parents nor we really believed in home gardening. But, using the project's seeds, fruit trees and fertilizers, we tried it out. Now we see that our home garden can give us a good and cheap meal every day. Selling vegetables also increases our income. Many of our neighbours have asked our advice about how to make a home garden. But the most important thing is that our daughter has become stronger, healthier and happy."

their children. Many mothers knew how much their children weighed and understood the use and meaning of the growth chart. In the project communes, more than half of the mothers understood the meaning of the coloured bowl and how to prepare it for their children, while in the control commune only a few were knowledgeable.

Children's nutritional status

In Viet Nam, children's nutritional status is classified according to weight-for-age (WFA) standards. "Normal" is classified as > 90 percent of standard WFA, "moderate malnutrition" as 75 to 90 percent, "severe malnutrition" as 60 to 74.9 percent, and "very severe malnutrition" as < 60 percent.

During the period of the survey, there was an improvement in the nutritional status of the children in the project communes: 15 out of 40 of the former improved from a nutritional status of severe malnutrition to one of moderate malnutrition, or from a nutritional status of moderate malnutrition to normal. In

covered were breastfeeding, weaning foods, hygiene and child care. During the interviews, the mothers were tested on their nutrition knowledge. The main topics addressed were mothers' knowledge of the nutrition status and weight of their children and understanding of the use of the growth chart and the meaning of the coloured bowl. For example, in Viet Nam, the "coloured bowl" concept is used to illustrate a balanced meal. The white rice or rice soup can be coloured brown by adding meat,

fish, crab or shrimp, green by adding vegetables and yellow by adding egg.

The project emphasized the importance of using the growth chart to empower mothers to maintain good nutritional status in their children and to prevent growth retardation. Figure 2 shows that there was a difference in knowledge between mothers in the project communes and those in the control commune. Most of the mothers in the project communes knew the nutritional status and weight of

contrast, none of the children in the control commune improved their nutritional status.

Child feeding practices

Monthly cooking demonstrations were given to the care givers so that they could see how to prepare a healthy meal and exchange experiences with others. Improved child feeding practices are the result of this practical application of nutrition knowledge. Figure 4 shows that, during the project, improvements were made in the daily vegetable and fruits consumption of the children in the project communes, and that most of the mothers changed their feeding practices after the project was implemented. In the control commune, however, no improvements were observed.

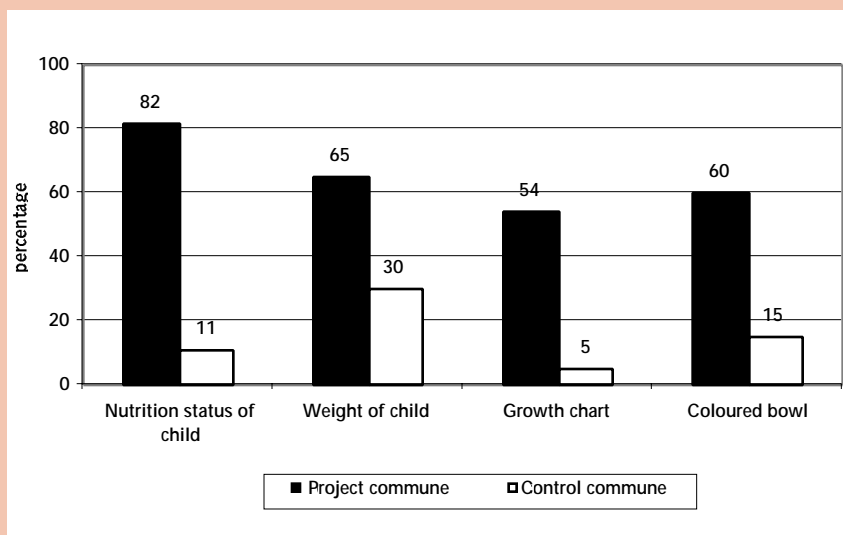
Sharing experience

Training courses, study visits, workshops and meetings were held so that participants could share experiences and exchange information. The project's assessment, development and training approach for integrating household food security, nutrition and home gardening has been used by other projects. National project experts carried out training courses for the German Agency for Technical Cooperation (GTZ), Save the Children Japan (SCJ), the Netherlands Development Organization (SVN), New Zealand Official Development Assistance (NZODA), the United Nations International Drug Control Programme (UNDCP), a FAO/Belgium project, a project funded by the European Union (EU) and the Italian Association for Participation in Development (APS). The implementation of this model in other communities is under consideration.

Evaluation mission

In October 1999, an evaluation mission by FAO, the Government of Viet Nam and Australian Agency for International Development (AUSAID) found that the project had directed its efforts to the poorest, most food-insecure households in 20 communes in four provinces, at a direct cost of US\$18 per household. The project was

FIGURE 2
Mothers' knowledge



K. Vlieghe

FIGURE 3

Nutritional situation of children

(percentage of children, October 1999)

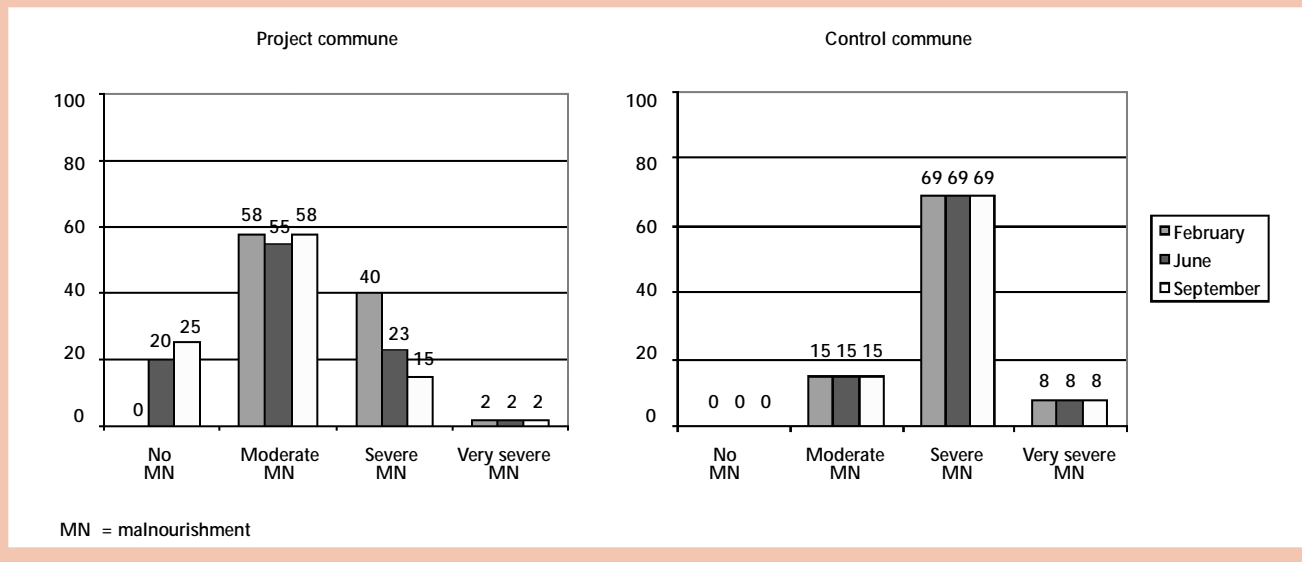
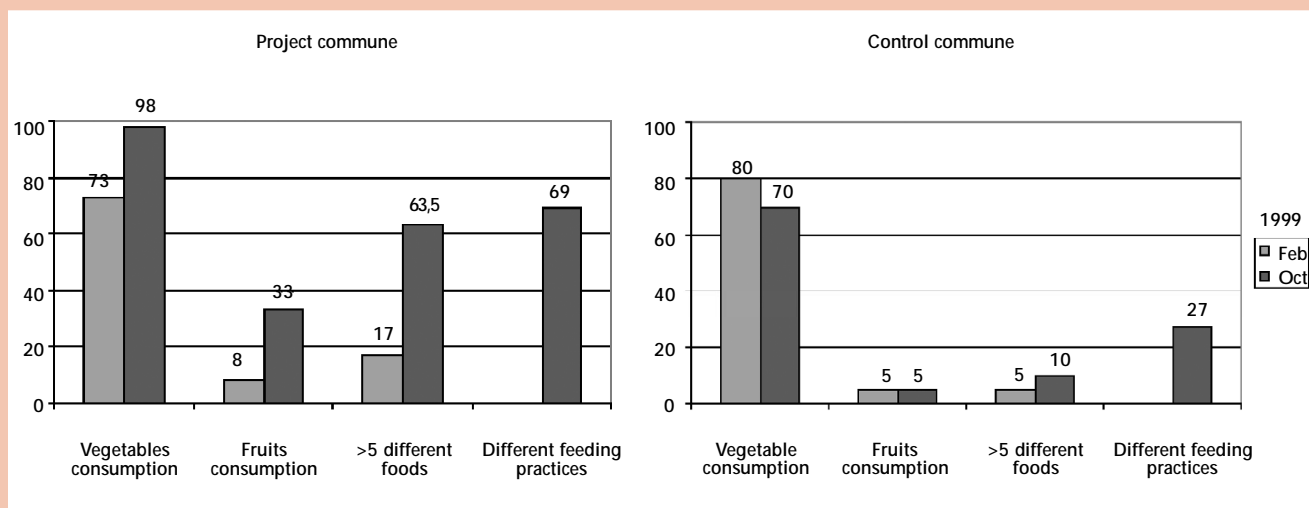


FIGURE 4

Comparison of feeding practices in project and control groups

(Percentage of children)



reducing the rate of malnutrition by 12.8 percent within two years. The evaluation confirmed the findings of a previous pilot study of four communes, in which the nutrition improvements were sustained. The project enabled 82 percent of the participating households to improve food production and food availability through better home garden, animal production and other agriculture activities.

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Programmes that link nutrition education, home gardening and livestock production can have a sustainable positive impact on child nutrition and household food security. In rural areas of Viet Nam, approximately 45 percent of children and 40 percent of women are malnourished. To improve nutrition and enhance household food security, a three-year pilot project was carried out from March 1997 to June 2000. The project integrated nutrition education with the transfer of small-scale agricultural technology to food-insecure households with malnourished children. The strategy was to give training and very small grants to selected households, which were clearly identified and closely monitored. Some 12 000 poor households, each with at least one young malnourished child, were assisted. In addition, 1 800 community workers and district-, province- and national-level staff from the agriculture and health ministries and the women's union were trained. Limited incentives were also given to commune networks.

Small baseline and follow-up surveys to assess the model were conducted after a seven-month interval in 1999. In addition, monthly growth monitoring was carried out during the study. The samples included 40 children from target households in the project communes and 20 children in a control commune. Care givers were interviewed in order to determine the degree of malnutrition, the frequency of feeding, the food products given, changes in feeding practices, awareness of nutritional status and weight of the children, understanding of tools and appreciation of what constitutes a nutritious meal. In the communes where the project was carried out there were improvements in child carers' knowledge and children's growth status.

An independent evaluation of the project concluded that it was cost-effective, innovative, adaptable and appropriate.

Viet Nam: rapport sur un projet sur la nutrition et la sécurité alimentaire des ménages

Les programmes associant l'information nutritionnelle, l'horticulture familiale et la production animale peuvent avoir un impact positif durable sur la nutrition des enfants et la sécurité alimentaire des ménages. Dans les zones rurales du Viet Nam, 45 pour cent environ des enfants et 40 pour cent des femmes sont mal nourris. Pour améliorer la nutrition et la sécurité alimentaire des ménages, un projet pilote de trois ans a été mené à bien de mars 1997 à juin 2000. Le projet intégrait l'information nutritionnelle et le transfert de technologies agricoles simples à des ménages souffrant d'insécurité alimentaire et dont les enfants sont mal nourris. La stratégie consistait à accorder une formation et de modestes dons à des ménages choisis, qui avaient été clairement ciblés et qui étaient suivis de près. Quelque 12 000 ménages démunis ayant chacun au moins un enfant mal nourri ont ainsi reçu une assistance. En outre, 1 800 agents communautaires et le personnel de district, de province et national des Ministères de l'agriculture et de la santé, ainsi que de l'Union des femmes ont été formés. Des incitations limitées ont également été accordées à des réseaux de communes.

Des enquêtes initiales et de suivi ont été menées à sept mois d'intervalle en 1999 pour évaluer le modèle. En outre, un suivi mensuel de la croissance a été effectué pendant l'étude. Les échantillons incluaient 40 enfants appartenant à des ménages cibles des communes visées par le projet et 20 enfants vivant dans une commune de contrôle. Les responsables des enfants ont été interviewés afin de déterminer le degré de malnutrition, la fréquence de l'alimentation, les produits alimentaires donnés, l'évolution des pratiques alimentaires, la connaissance de l'état nutritionnel et du poids de l'enfant, la compréhension des instruments et l'appréciation de ce qui constitue un repas nourrissant. Dans les communes où le projet a été réalisé, on a constaté une amélioration des connaissances des responsables des enfants et de la croissance de ceux-ci.

Une évaluation indépendante du projet a conclu que ce projet était rentable, novateur, adaptable et approprié.

Viet Nam: informe sobre un proyecto de nutrición y seguridad alimentaria en los hogares

Los programas que vinculan la educación nutricional, el mantenimiento de huertos familiares y la producción pecuaria pueden tener efectos positivos y sostenibles sobre la nutrición infantil y la seguridad alimentaria de los hogares. En las zonas rurales de Viet Nam, aproximadamente el 45 por ciento de los niños y el 40 por ciento de las mujeres sufren malnutrición. Para mejorar la nutrición y fomentar la seguridad alimentaria de los hogares, se llevó a cabo desde marzo de 1997 hasta junio de 2000 un proyecto piloto de tres años de duración. El proyecto integraba la educación nutricional con la transferencia de tecnología agrícola en pequeña escala a hogares expuestos a la inseguridad alimentaria y con niños malnutridos. La estrategia consistió en impartir capacitación y proporcionar cantidades muy pequeñas a título de donación a hogares cuidadosamente seleccionados y seguidas de cerca. Se prestó asistencia a 12 000 hogares pobres, cada uno de los cuales tenía como mínimo un niño pequeño malnutrido. Además, se capacitó a 1 800 agentes comunitarios y a personal local, provincial y nacional de los Ministerios de Agricultura y Salud y de la Unión de Mujeres. También proporcionaron incentivos limitados a redes de municipios.

En 1999 se realizaron, a intervalos de siete meses, encuestas de referencia y seguimiento en pequeña escala para evaluar el modelo. Además, durante el estudio se realizó una vigilancia mensual del crecimiento. Las muestras incluyeron 40 niños de hogares seleccionados en los municipios del proyecto y 20 niños de un municipio de control. Se realizaron entrevistas a las personas encargadas del cuidado de los niños para determinar el grado de malnutrición, la frecuencia de la alimentación, los productos alimenticios suministrados, los cambios en las prácticas de alimentación, el conocimiento del estado nutricional y el peso de los niños, la comprensión de los instrumentos y la valoración de lo que constituía un alimento nutritivo. En los municipios donde se había llevado a cabo el proyecto se observaron mejoras en los conocimientos de las personas encargadas del cuidado y en el estado de crecimiento de los niños.

Una evaluación independiente del proyecto llegó a la conclusión de que era eficaz en función de los costos, innovador, adaptable y apropiado.