

Nepal Donor Report

Country Status

Key Facts of Nepal:

Country: 147,181 km²

Population: approx. 30 million people

Per capita income: 1,200 (Worldbank 2010)

Economic growth: 4.6% (Worldbank 2010)

Political structure: 14 administrative zones, 75 districts

Although there has been a drastic reduction in child and infant mortality decreasing from 118 deaths per 1,000 live births in 1996 to 61 deaths per 1,000 live births in 2006 general malnutrition continues to be a major problem with almost 50% of Nepal's children still suffering from chronic malnutrition as shown by rates of stunting. Children whose growth and development is impaired due to stunting before two years of age do not recover this loss later in life. In addition almost half of the under-five population, and approximately 75% of the under-two population suffer from iron-deficiency anemia.

Malnutrition increases drastically in children between six and 23 months and thereafter remains more or less constant. This is largely due to inappropriate complementary feeding, including the amount, safety and nutrient-quality of complementary foods and the frequency of feeding. Only 60% of children aged six to seven months are provided with complementary foods. Children are only fed an average of 1.2 meals per day. Food provided to children is generally monotonous, consisting of low-energy-dense cereal porridge.

For most families in Nepal, regular access to micronutrient-rich foods is a distant reality. As micronutrient fortification initiatives are in the early stages of development, there is a need to provide preventive multiple micronutrients to ensure children receive the essential vitamins and minerals during complementary feeding in early years.

The Government is committed to make micronutrient powder (MNP) supplementation, including zinc, a central component of the national nutrition plan and links it with the Infant and Young Child Feeding (IYCF) program to increase mothers' knowledge of key infant feeding and care practices to ensure that more than 80% of children under two consume the multiple micronutrient powder appropriately.

With funds from Zinc Saves Kids UNICEF will support the Government's integrated MNP/IYCF strategy in 2011 and 2012 with:

- conducting a pilot project with two delivery models in six districts to identify the most cost-effective and efficient strategy for national scale-up
- expanding the program to 15 districts

- building technical and management capacity within the government to roll-out the program on a national level by 2015

In 2005 the Nepalese Government adopted the WHO and UNICEF guidelines on clinical management of acute diarrhea in children under five however, the occurrence of frequent diarrhea continues to be of concern. Diarrhea is the second-leading cause of death among children under five in Nepal. The average Nepali child has an attack of diarrhea at least 1.7 times a year. There is a need to increase the national zinc coverage for diarrhea treatment to significantly reduce diarrhea-related illness and death.

In 2011 and 2012 UNICEF supported by Zinc Saves Kids will support the Government of Nepal with efforts aimed at:

- increasing the awareness of the importance of zinc tablets in the treatment of diarrhea
- strengthening supply and logistics management to prevent shortages and ensure timely and adequate supplies of zinc through Government channels

Micronutrient Supplementation linked with Infant and Young Child Feeding

UNICEF Activities

National consensus-building, program development and fund-leveraging:

- Stewardship and technical support to the Government for advocacy and consultation with key stakeholders including World Bank, US, UK and Australian development agencies.
- Development of a strategic plan for MNP/IYCF scale-up for advocacy and leveraging funds.
- US\$ 4 million have been leveraged for scale-up starting in 2013
- Formation of task force group including Ministry of Health and Population; UNICEF, Micronutrient Initiative; Helen Keller International World Food Program, research and NGO partners

Design of pilot program and implementation in six districts

- Two different models were designed and implemented in six districts in order to identify the best delivery method for MNP supplementation at the community level.
 - MNP distribution via Female Community Health Volunteers in the districts of Gorkha, Palpa and Rupandehi.
 - MNP distribution via health facilities in Makwanpur, Parsa and Rasuwa
- The pilots started in May 2010 and were implemented one after another; each running 18 months. The pilots target a total of 96,634 children aged six – 23 months who will receive two rounds of 60 sachets of MNP.
- UNICEF provided financial, technical and logistical support
- Implementation partner: Max Pro

Training, education and follow-up

- Two-day district orientation and planning meetings with district health staff and key government officials to build technical and management capacity

- Community-level training was provided to a total of 9,590 people consisting of:
 - two-day orientation meetings for heads of health facilities to establish detailed action plans and to provide community-level training
 - four-day training of health facility staff and Female Community Health Volunteers - who are the primary agents for spreading program messages in the community - on the importance of micronutrients; feeding and care practices; counseling skills; supplement distribution; recording and reporting
- Urban training sessions were provided to an additional 408 key personnel
- Mothers' Groups provide a forum where mothers and future mothers can go to understand maternal, child and other health issues. Meetings are held on a monthly basis and are facilitated by local Female Community Health Volunteers. A total of 38,616 mothers in four districts were educated on the benefits of micronutrient supplementation and were informed about upcoming rounds of multiple micronutrient powder distribution.
- At their monthly meetings Female Community Health Volunteers share activity reports with the local health facility and discuss health-related activities and issues. Program team staff attended 51 meetings and interacted with 630 Female Community Health Volunteers.

Coordination and alliance building

- A total of 249 coordination meetings were held with government line agencies; community-based organizations, savings and credit groups, forest user groups
- 1,717 people were involved and committed to promote information on MNP and IYCF practices through their channels

Communication and outreach

- In Nepal MNP has been branded and distributed under the name of "Baal Vita"
- Extensive use of brochures, posters, signs and flip charts to promote Baal Vita and IYCF practices
- Wall clocks and bags with the Baal Vita logo were distributed to community leaders, teachers, youth clubs and health facilities
- From December 2010 – May 2011 radio spots and jingles were aired on eight radio stations in Makwanpur (38 times per day) and Palpa (30 times per day)
- 238 program signs were placed in prominent places in Makwanpur, Palpa and Rasuwa

Supplies and Logistics Management

- The Government's Logistics Management Division keeps all MNP supply during the pilot phase and records the inventory
- Implementing partner Max Pro takes care of timely delivery of the relevant quantity of MNP to the local health facilities
- Health facilities are responsible for keeping track of stock-level inventory management

Monitoring and Evaluation

- A detailed monitoring and evaluation plan has been developed in collaboration with the US Centers for Disease Control and Prevention.
- In each pilot district, a surveillance system has been established to track the performance of micronutrient supplementation, document the process, and identify bottlenecks. Households, Female Community Health Volunteers and health facilities are being visited randomly to assess program progress and to identify any difficulties relating to distribution. Progress and constraints are being discussed on a regular

basis with district health office staff during Government planning and review meetings in the districts.

- For the pilot period, one program team District Coordinator has been assigned in each district to facilitate overall field implementation of program activities, including regular monitoring and reporting. In each district, five to seven program team Field Supervisors are assigned to collect regularly data.
- By February 2011, 4,752 households in Makwanpur, Palpa and Rasuwa had been visited; there had been 505 visits to health facilities – 4.5 times to each health facility in Makwanpur, four times per facility in Palpa, and six times per facility in Rasuwa; 999 Female Community Health Volunteers were surveyed - this is 91.2% of the volunteers in Makwanpur, 81.8% in Palpa, and 46% in Rasuwa
- Officials from the Ministry of Health and Population's Child Health Division and District Health Offices frequently visit program sites to supervise and monitor activities
- An independent survey team has conducted a three-month survey in Makwanpur and Palpa to collect information on program achievements including supplement coverage, compliance, and infant and young child feeding practices.
- An independent organization, the Nepali Technical Assistance Group, conducted a coverage survey in Makwanpur and Palpa from October to December 2010. In each district, 360 mothers or caregivers and 30 female community health volunteers were randomly surveyed.

MNP/IYCF Program Results

Supplement Coverage of first round of 60 sachets of MNP supplements measured in February 2011

District	Delivery Model	Time Frame	Estimated Target Quantity of children	Coverage measured Feb 2011 in %	Coverage measured Feb 2011 - number of children
Makwanpur	Health facility	May 2010 – Oct 2011	13,914	70%	9,765
Palpa	Female community health volunteers	June 2010 – Nov 2011	10,667	96%	10,233
Rasuwa	Health facility	Sept 2010 – Feb 2012	1,781	72%	1,284
Gorkha	Female community health volunteers	Jan 2011 – June 2012	10,589	34%	3,596
Rupandehi	Female community health volunteers	May 2011- Oct 2012	No data available yet		
Parsa	Health facility	May 2011- Oct 2012	No data available yet		

Preliminary findings suggest that the distribution of the MNP through Female Community Health Volunteers is more efficient. This result has preliminary character as pilots were rolled out gradually and are ongoing. The pilots in Rupandehi and Parsa hadn't started when the data was collected in February 2011.

Compliance status

Compliance refers to the regular intake of the supplement by a child, optimally consuming the full 60 sachets over a period of six months. The compliance status of the first three districts has been estimated based on interviews by Field Supervisors with a total of 3,979 mothers.

Optimum Compliance 60 sachets	Medium Compliance 48-60 sachets	24-47 sachets	12-23 sachets	Less than 12 sachets
51%	18%	20%	6%	5%

Ownership and active involvement

The program receives good support from Government personnel and has been well-received by health facilities. Program field staff is committed to inform families of the importance of MNP for young child nutrition and to convince them to use MNP when preparing complementary food.

Zinc Supplementation for diarrhea treatment

UNICEF Activities

National consensus building, program development and review

- The Child Health Division of the Ministry of Health has formed a working group of which UNICEF is a key member to advance zinc treatment on a national level.
- Existing training materials for community-based integrated management of childhood illness have been revised to include the use of zinc for diarrhea treatment. New guidelines and kits for program introduction have been developed.

Capacity strengthening

- Local health workers and Female Community Health Volunteers who are the primary providers of community-level counseling received an orientation on treating diarrhea with zinc tablets alongside oral rehydration salts (ORS).
- Zinc tablets and ORS were supplied to all health facilities and health workers who participated in the orientation sessions.

Behavior change communication

- With the support of UNICEF, Save the Children and the United States Government the Ministry of Health and Population created a comprehensive behavior change communication to raise the awareness of zinc for diarrhea treatment; to promote behavior change; and to create demand for quality health service.
- The "Chatting with my best friend" radio program which has seven million regular listeners was chosen as the vehicle for communicating the importance of zinc in the treatment of diarrhea through drama, discussion and a slogan completion. The winning slogan "Treat your kids with ORS and zinc. Save your children from the risk

of diarrhea” has been included in the national campaign and is used on communications materials such as billboards and posters.

- Awareness-raising street performances were used following the radio program to mobilize people further to use zinc and ORS for diarrhea treatment.

Communication materials

- A range of communications materials have been produced including posters, billboards, a communication kit for Female Community Health Volunteers, a radio service announcement for local and national FM stations; and a video documentary.

Monitoring and evaluation

- The Health Management Information System is an important mechanism for monitoring the progress of the zinc program. The system collects information on the incidence of diarrhoea and the utilization of zinc for diarrhea treatment from the various health workers and reports back to the central level on a monthly basis.
- In 2010, UNICEF supported the Nepali Technical Assistance Group to conduct a semi-annual micronutrient survey in eight randomly selected districts. It revealed that 81.7 percent of mothers used oral rehydration salts to treat their children for diarrhea, while only 10.3 percent used both oral rehydration salts and zinc for the same purpose. The overall use of zinc for diarrhea treatment, both on its own and with oral rehydration salts, stands at 20 percent. As a result a national research was launched in July 2011 to explore the causes of the low zinc use
- UNICEF has signed a Project Cooperation Agreement with the Micronutrient Initiative to conduct a strategic review of the zinc treatment program to recommend appropriate strategies to increase coverage.

Strengthening supply and logistics management

- The government of Nepal has a logistics management division which is responsible for procuring, distributing and managing essential vaccines, drugs and health supplies. Zinc is included and has been accorded high priority. The needs are assessed every year. Due to political instability procurement and distribution can get delayed causing supply shortages.
- In 2010 UNICEF supported the national procurement of zinc and ORS with an additional two million zinc tablets and 250,000 sachets of ORS.

Zinc Supplementation Results

Zinc use

- While nationally the use of zinc and oral rehydration salts to treat diarrhea is low, in Banke, one of the program districts supported by UNICEF and IZA, good progress can be seen in the use of zinc after the training conducted in 2010. Health Management Information System data for 2010/11 reveals district coverage of the use of zinc and oral rehydration salts at 74%. 92% of cases reported at the health facility-level were prescribed zinc along with ORS. At the community level, Female Community Health Volunteers have treated 68% of the total diarrhea cases with zinc and ORS. This indicates a positive trend, and the district aims to increase zinc coverage in the coming years.

Compliance

- According to the Nepali Technical Assistance Group micronutrient survey conducted in eight districts in 2010, full compliance of zinc treatment (giving 10 tablets for 10

days) during an episode of diarrhea was reported at 66.8%. Among the mothers who did not give the full dose, 74% reported stopping the zinc tablets because the diarrhea stopped after a few days of zinc intake and they did not see it as necessary to give the full dose.

- The survey also collected information from mothers on the perceived benefits of using zinc. 92.8% of mothers said they felt that diarrhea stopped quickly after the intake of zinc along with oral rehydration salts. Almost 12% of mothers also responded that there was an increase in their child's appetite, while other benefits mentioned included reduction of future episodes of diarrhea.

Planning

Micronutrient supplementation linked with Infant and Young Child Feeding

- Completion and evaluation of pilot project in 2012
- Definition of a national scale up policy for all 75 districts
- Program expansion to 15 districts to start mid-2012.
- Scale-up in remaining 60 districts to start in 2014

Zinc supplementation for diarrhea treatment

- Support government in implementing zinc intensification activities
- Targeted behavior change communication in low coverage/compliance districts
- Support youth mobilization activities