

Please note: This annex is a compilation of comments from various organizations around the world working on anemia, iron deficiency, zinc, and folic acid. This is not intended as a complete description of the individual programs. Regions denoted on this summary chart are only selected to help readers find various countries. Please contact the individuals listed for further information or to clarify any results. All readers are encouraged to contact the International Nutrition Foundation with any corrections or updated information. Such corrections and updates will be noted and included in the web-based version of the report and on the IDPAS Iron World 4 CD-ROM. Thank you.

Region: Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS)

Country	Organization	Contact	Description of Intervention
Albania	UNICEF	Mariana Bukli; mbukli@unicef.org	Programming based on Manual Iron Deficiency Anemia – Assessment, prevention and control, and other programming tools. The projects' status is as follows: an agreement with the Ministry of Health and professional organizations on the prevention and treatment protocol and piloting of iron and folic acid supplementation in 4 districts. However, the compliance to supplementation schedule remains a challenge. Click here for additional information.
Armenia	UNICEF/USAID	Lianna Hovakimyan; lhovakimyan@unicef.org	USAID "Nutritional Surveillance System", will be in operation starting mid spring this year, among other components of the nutritional status check, iron deficiency anemia in women and children will be registered. B hemoglobinometers were provided. First results of the pilot nutritional system are expected soon. A further evaluation of the programme will be conducted at the end of the year. Click here for additional information.
Azerbaijan	UNICEF	Dr. Akif Saatcioglu; Dr. Dinara Quliyeva; dkulieva@unicef.org	Ministry of Health of Azerbaijan/UNICEF Nutrition and Micronutrients program (Iron Deficiency Disorders) which is currently unfunded. Some of the needed actions are as follows: conduct a feasibility study to identify available and applicable method for food fortification to reduce IDA; a study to identify possible means of fortification and feasibility, as well as among target both specific target groups and the population as a whole. In this respect the identified means of fortification, pilot implementations will be initiated on food fortification. Click here for additional information.
Azerbaijan	ADB	Emillie Ballares; eballares@adb.org	Goal: To reduce significantly the iodine deficiency disorders (IDD) and iron deficiency anaemia (IDA) prevalence among children and mothers of Azerbaijan through universal salt iodisation and wheat flour iron fortification. Industrial enrichment of food with these micronutrients is especially important for elimination of iron and iodine deficiency due to some advantages of fortification compared to other policies: firstly, once established, this production is sustainable and cost-effective; secondly, there is no need to change the nutrition traditions of the population; and thirdly, fortified food can target both specific target groups and the population as a whole. In this respect the Project allows for implementation of the long-term strategy for prevention of iodine deficiency among the entire population as well as of iron deficiency anaemia among women of reproductive age and young children. Click here for additional information.
Asian Countries in Transition	KAN, ADB, JFPR	Kazakh Academy of Nutrition (KAN); nutrit@nursat.kz, tazhybaev@nursat.kz	KAN has carried out situation analyses, elaborated and developed premix for wheat flour fortification which includes vitamins and minerals: iron, zinc, thiamin, riboflavin, niacin and folic acid and its composition was approved by The Round Table Meeting (in part funded by KAN, UNICEF, ADB). Also KAN will organize the monitoring of quality of fortified wheat flour and elaborate technical documents and trade labels on the fortified food products. The objective of this project is the improvement of the situation on iron deficiency anemia and iodine deficiency disorders in the Central Asia by producing and consumption of fortified wheat flour and iodized salt. In 1999 a pilot region survey on evaluation of efficacy of weekly ferro-therapy on pregnant women, RA women and young children, suffering from iron deficiency anemia, was conducted. The level of hemoglobin was estimated before and after six month's course of therapy. The manual "Principal Preventive and Therapeutic Approaches to Decreasing Iron Deficiency Anemia among Reproductive Age Women and Early Age Children in Kazakhstan and Middle Asia" was published and implemented in 5 regions of Central Asia. Click here for additional information.
Belgrade	UNICEF	Oliver Petrovic; oliver@unicef.org	On the basis of the national survey which showed that approximately one third of women and children in FRY are anemic, for the first time it was planned that the Programme for IDA control should be initiated in the country. Activities planned for 2002: Situation Analysis, National Strategy for IDA control (for advocacy, social communication, formulation of appropriate strategy on IDA control and provision iron/folate tablets). Click here for additional information.
Bosnia and Herzegovina	UNICEF	Jill Zarchin; jzarchin@unicef.org; Selena Bajraktarevic; bajraktarevic@unicef.org	The diagnostic-therapy protocol for prevention, diagnosis and treatment of nutritive anemia among children under 6 years of age was developed and adopted by government. A total of 227 health workers were educated in prevention and therapy of iron anemia among children under 6 years of age through 13 training seminars. After training seminars, evaluation of new knowledge and practices was conducted. Three education kits were made, aimed at parents and health workers with topics on prevention and treatment of children with anemia ("Anemia among children up to 1 year old", Anemia among children aged 1-6" and "Healthy nutrition"). Different types of iron supplements were donated to health institutes and distributed to children during the treatment. The MoHs and Pediatrician Association adopted the diagnostic-therapy protocol for prevention, diagnosis and treatment of iron anemia among children under six years of age. Education was carried out in 13 health centers which is 20 per cent of all health institutes in Bosnia and Herzegovina. Programme results have defined risk groups and risk factors. Click here for additional information. Documents 1 2 3
Georgia	UNICEF	Mariam Jashi; mjashi@unicef.org	IDA has been identified as one of the priority areas for UNICEF-GoG partnership for 2001-2005. For 2002-2003 UNICEF targets at fund-raising for supply assistance, capacity building and IEC for IDA prevention among pregnant/lactating women and HCWs. Subject to availability of unfunded donor resources UNICEF Georgia as per INACG/UNICEF/WHO recommendations considers provision of 60mg+0.4 mg Ferrous Salt/Folic Acid supplements to all pregnant and lactating women (estimated 45,000). Central ToT and district level training activities will be the integral component of IDA prevention strategies coupled with a comprehensive communication support. Click here for additional information.

Kosovo	UNICEF	Mr. Ayadil Saparbekov; asaparbekov@unicef.org; Dr. Lulzim Cela; lcela@unicef.org	Establishment of the Micro-nutrient Task Force for Kosovo planned. Anemia Prevention and Control Programme planned. Based on the results of the Micro-nutrient Survey conducted in December 2001, a comprehensive programme targeting the iron-deficiency will be developed. Results of the survey awaited for March-April 2002. Click here for additional information.
Macedonia	UNICEF	Nora Sabani; noras@unicef.org.mk; Katerina Venovska; kate@unicef.org.mk	Surveys are essential in identification of anemia status among most vulnerable groups and developing action oriented plan of action. Mainly due to financial reasons survey data were not available in the country. The MICS report with the micronutrient component (2000) shows: MICS Report: the prevalence of anemia in children 6-59 months at different ages and the anemia and iron status in children 6-59 months. A report from the survey on anemia status among pregnant women and breastfeeding mothers (2001 report) indicated the prevalence of anemia among examined pregnant women and breastfeeding mothers: 24.7 % of pregnant women had hemoglobin values under 11 g/dL, while 26.1% of Breastfeeding mothers with infants under 6 months had hemoglobin values under 12 g/dL. The MICS Report is available. Click here for additional information. Documents: 1 2 3 4 5 6 7 8
Moldova	UNICEF	Viorica Berdaga; vberdaga@unicef.org	UNICEF provides support in two areas: promotion of flour fortification and development of standards on iron supplementation. For this purpose UNICEF supports a Technical Working Group that is responsible for the development of legal framework (Food Law) and enforcement mechanisms for its implementation. Under TWG, there is also a group of health professionals working on the standards on iron supplementation. The major constraints are related to under-financing of the nutrition-related activities in the country and frequent political changes that impairs the commitment and support to above-mentioned programmes. Click here for additional information.
Mongolia	World Vision	Dr. Stanley Zlotkin; zlotkin@sickkids.ca	An evaluation of biological outcomes and the distribution of micronutrient sprinkles in over 10,000 Mongolian infants (target population 6-36 mo). An 18 month long programme. Indicators include distribution system development, coverage, number of sachets distributed per month, number of sachets received by mothers, and number of sachets administered to children. Sachets are a single does and the entire contents are sprinkled on whatever food is served in the household. Outcome indicators include reduction in the prevalence of anemia and rickets, and cost-effectiveness analysis. A total of 13,301 infants were identified for participation in the sprinkles distribution program. Three months into the program, coverage of the target population (infants 6-36 mo.) reached 82%. Click here for additional information.
Turkey	UNICEF	Dr. Canan Sargin; csargin@unicef.org	MOH is planning to launch a public campaign to reduce maternal and neonatal death this year in April. Campaign will last until 2005. Awareness increase on the importance of antenatal check (so reduction of iron deficiency anemia during pregnancy) is one of the key issues of the campaign. Fe/folate tablets will be distributed in 20 project provinces identified for 2002. National Food and Nutrition Strategy Report was prepared in 2001 by a multi-sectorial working group by the initiative of State Planning Office. We plan to establish/reactive National Food and Nutrition Committee and prepare National Food and Nutrition Policy Plan of Action this year with MOH and related sectors. The problem is that MOH seems to be reluctant to work with other sectors. Click here for additional information.
Turkmenistan	UNICEF CARK	Anatoly Abramov; aabramov@unicef.org	Implementation of the National Programme on Anemia Prevention and Control: Provision of iron supplements (syrup for children 6-12 months, Ferrous Sulfate and Folic Acid tablets (60+0.4mg) for children 1-2 years and fertile age woman (14 - 49 years). Training for medical staff. Publication of advocacy materials. Monitoring visits to project sites. Provision of reagent for measuring hemoglobin levels. Anemia Prevention and Control implemented in two pilot Provinces covering 30% of population the Country (targeted groups). National standards on flour fortification with iron: Provision of Ferrous Sulphate for wheat flour fortification. Training of technicians at pilot mills on lab quality control. Initiation of mass production of fortified flour at 3 pilot mills. Demographic Health Survey 2000 included anemia questions. Click here for additional information.
Ukraine	UNICEF/CDC	Elena Sherstyuk; esherstyuk@unicef.org	In 2002 a survey is being prepared to provide an initial national baseline assessment of iodine and iron deficiency levels in Ukraine. This activity is implemented with the technical assistance of CDC in Atlanta. The results of this baseline assessment are expected to provide an additional advocacy tool for the promotion of flour fortification with iron and other micronutrients in Ukraine. Click here for additional information.
Eastern Mediterranean Region	WHO/UNICEF/MI/CDC	Bruno de Benoist; debenoistb@who.int	In the Eastern Mediterranean, WHO is implementing with UNICEF a programme of flour fortification, funded by the Micronutrient Initiative, in 15 countries of the Region. The monitoring component is supported by CDC and MI provides the finances. Click here for additional information.
Country	Organization	Contact	Description of Intervention
Bangladesh	MI	Ibrahim Daibes; idaibes@micronutrient.org; Venkatesh Mannar; vmannar@micronutrient.org	Improving iron and folate supplementation for pregnant and lactating women through the Bangladesh Integrated Nutrition Project. Click here for additional information.
Cambodia	IFSP	Dr. Philippe Longfils; 01283739@mobitel.com.kh	In April 1999, IFSP started a School Health Programme in 10 schools belonging to the catchment's area of two HC: Dang Tung (DT) and Trapeang Reang (TR) in OD Chhuk. Each school session started with health education information. In July 1999, a school survey was prepared from two cluster schools in Dang Tung and Trapiang Reang. A hemoglobin survey was done in the school survey. A follow-up survey was done in July 2000 where hemoglobin levels were measured again. Iron-folic acid tablets (one per week) were distributed to school children for 20-22 weeks in 2000. IFSP programme will be integrated with IFAD programme in 2002. The Health Component of IFSP supports 5 Health Centers in the province, covering 59 villages, 26 schools and a population of 58,000 inhabitants. Click here for additional information. Documents 1 2

Cambodia	WHO/UNICEF/ Japan Government/ Ministry of Health	Dr. L. T. Cavalli-Sforza; tommaso@wpro.who.int	The objectives of the program to be introduced into Cambodia are: 1.) To introduce a program of preventive iron/folate supplementation to women of reproductive age (WRA) with weekly doses of 60 mg elemental iron and 3.5 mg of folate in the workplace (garment factories), secondary schools and rural communities, through the applications of social marketing and participatory communication approaches. 2.) To assess the effectiveness of weekly iron/folate supplementation in improving the knowledge, attitudes and practice as well as iron status of women of reproductive age and secondary school girls in the program areas. Click here for additional information. Documents 1 2 3
China	MI/UNICEF/ILSI	Dr. Junshi Chen; jshchen@public.east.cn.net	A study on Fe fortified soy sauce. A multiple nutrients (including iron) wheat flour fortification program will be started in early 2002. Iron fortified soy sauce is not only effective in controlling iron deficiency and anemia, but also supported by industry and government. A national alliance is critical for the successful implementation of this soy sauce program. Data will be used to impact the decision makers. Click here for additional information. Documents 1 2
China	UNICEF/ADB	Ray Yip; ryip@unicef.org; Saba Mebrahtu; smebrahtu@unicef.org	UNICEF in collaboration with ADB provided support to the government of China to organize and implement a high-level forum for public nutrition and socio-economic development to advocate for nutrition investment- particularly in poor areas. Iron fortification and supplementation were part of the major recommended strategies to reduce anemia. For the 2001 Annual Programmed Review for Health and Nutrition - an innovative approach was used to highlight some key programmatic and technical issues as well as to recognize outstanding achievements in nutrition and health implementation. (1) Achievements: Preparatory work ongoing for community-based randomized controlled supplementation trials; and Encouraging preliminary results from NaFeEDTA fortified soy sauce (2) Constraints: Delays in launching supplementation trials due to longer than anticipated processes involved to obtain clearance to use multiple micronutrients. Click here for additional information.
China	Project IDEA/ILSI	Sonu Deol; sdeol@ilsi.org; Alex Malaspina; amalaspina@ilsi.org	A bioavailability study conducted in young female Chinese subjects using stable isotopes showed that the iron absorption rate from NaFeEDTA fortified soy sauce (10.47%) was twice as high as the iron absorption rate from ferrous sulphate fortified soy sauce (4.74%). These results are consistent with previous studies that have been conducted in other countries. A randomized double-blind study, on the therapeutic effects of NaFeEDTA fortified soy sauce in anemic school children, showed that iron deficiency anemia could be substantially reduced by providing NaFeEDTA fortified soy sauce everyday for three months. Click here for additional information
China	WHO/WPRO	Dr. L.T. Cavalli-Sforza; tommaso@wpro.who.int	Advocacy of interventions on anemia and other nutrition interventions has been conducted by using the Profiles programme in China, in November 2001, and supporting meetings of policy makers to report findings (total support provided is around \$30,000). Click here for additional information. Documents 1 2 3
China		Harold Sandstead; hsandste@utmb.edu	Growth impairment and developmental delay are common; > 40 % of children are stunted. The writer suspects zinc deficiency is partly responsible. The writer also suspects low zinc nutrition affects pregnancy outcomes and morbidity from infectious diseases. See full report for details. Click here for additional information.
India	MI	Ibrahim Daibes; idabies@micronutrient.org; Venkatesh Mannar; vmannar@micronutrient.org	Supporting an assessment of the national anemia control program in India. Fortification of wheat flour with iron for the Targeted Public Distribution System in India. Click here for additional information.
India	National Institute of Nutrition	Dr. Shahnaz Vazir; s_vazir@hotmail.com	Conducted a study on urban slum children in Hyderabad, India to determine whether lead exposure influences cognitive function. Found that lead and hemoglobin are inversely related and in combination do influence some cognitive functions and attention-concentration in children. Click here for additional information.
India		Dr. Prakash V Kotecha; P.V.Kotecha@yahoo.com	A district Adolescent Anemia Control Program (for Vadodara district). 65,000 school girls from 426 schools are getting once a week IFA supplementation (supervised). A baseline survey indicated that 74.7% girls were anemic. One year after the program the prevalence of anemia has decreased and the mean Hb have increased. Also have serum ferritin data for both studies. Click here for additional information.
India		Dinas Kesehatan Kabupaten; dinkes_bloraj@yahoo.com	A nation wide anemia control program (ferrous sulfate & folic acid supplementation) in our district (Blora); however, the capability to assess or to evaluate the results is missing. Click here for additional information.
India	National Institute of Nutrition	Dr. K. V. Rameshwar Sarma; k_rameshwar@hotmail.com	Micronutrient cocktail including iron and folic acid in a health drink for nine months. Study completed. No desired effect in boarding school children on hemoglobin. Click here for additional information.
India	National Institute of Nutrition	Dr. K. V. Rameshwar Sarma; k_rameshwar@hotmail.com	Low cost nutrition recipes supplementation trial to select appropriate recipe for Mid Day Meal and ICDS programs. Project is in progress. Click here for additional information.
Indonesia	Polyclinic	Dr. Jum'atil Fajar; jumatil@hotmail.com	Give health education about iron deficiency anemia to the community in my working area. Treating patients with iron deficiency anemia. Give pregnant women iron tablets through an antenatal program. Supervise nurses and midwives on treating iron deficiency anemia in health center and health sub center. Give training about iron deficiency anemia to community health workers. Write about iron deficiency anemia to local newspaper. Click here for additional information.
Nepal		Dr. Lindsay Allen; Lindsay.Allen@mrc-hnr.cam.ac.uk	We have just completed a big project that was successful in adding nutrition education and the introduction of vitamin A sources into an agricultural development program. The intervention improved nutrient intakes including vitamin A. The project desperately needs to be continued with other funds but the political situation is too unstable at the moment. In rural Nepal, 86% of pregnant women were deficient in riboflavin, and we are investigating whether riboflavin supplements improve night blindness recovery a pupillary reaction time more than vitamin A alone. Click here for additional information.

Nepal	UNICEF	P.O. Blomquist; pblomquist@unicef.org	Iron Supplementation Programme: Nationwide iron supplementation of pregnant women through the health system- Low coverage (10%) and compliance (<1% full compliance). Recommendations from an operational research: Bring the tablets and services closer to the communities; Mobilize community health volunteers for demand creation. Click here for additional information.
Nepal	UNICEF	P.O. Blomquist; pblomquist@unicef.org	National IEC Campaign: Development and dissemination of media messages on anemia and the importance of iron supplementation during pregnancy for both general public and health workers. - Radio spots (in five local languages)- TV spots- Short video clips. Click here for additional information.
Nepal	UNICEF	P.O. Blomquist; pblomquist@unicef.org	Intensification of Anemia Control: Technical assistance for strategy formulation and planning for community-based intensification of anemia control. An operational research has found that community-based delivery mechanism and demand creation is effective to increase coverage and compliance. Click here for additional information.
Nepal	UNICEF	P.O. Blomquist; pblomquist@unicef.org	Deworming of Pre-School Children: Biannual deworming of pre-school children through the national vitamin A programme.- 40/75 districts covered; expansion nationwide by 2004. Distribution mechanism (biannual National Vitamin A Day which has maintained the coverage higher than 85%) seems effective. Coverage monitoring to be improved. Click here for additional information.
Nepal	UNICEF	P.O. Blomquist; pblomquist@unicef.org	Deworming of Pregnant Women: Policy on deworming during pregnancy has been approved. Guidelines and pilot implementation plan to be developed. Integration into antenatal care. Click here for additional information.
Pacific Islands	WHO/WPRO	Dr. L. T. Cavalli-Sforza; tommaso@wpro.who.int	A survey on anemia, weight, height, helminth infestation, water/sanitation, building on an existing programme for the elimination of filariasis, in 15-20 Pacific islands (the amount invested in the whole survey is around \$100,000). Click here for additional information. Documents 1 2
Philippines	USAID	Dr. Alicia Lustre; infodc@pacific.net.ph	Iron Fortified Rice Subsidy Program: The Department of Social Welfare and Development (DSWD) in collaboration with the National Food Authority (NFA) was able to distribute 204 tons or 4,084 bags of 50 kg/bag of iron fortified rice to two pilot areas comprising 2,100 Filipino poor families in Surigao del Norte in the island of Mindanao and in Sorsogon, in the southern part of the island of Luzon for a period of three to six months, respectively. The 1.75 tons of iron-rice premix used in fortification was produced by the NFA. The Breakfast Feeding Program with Iron Fortified Rice: The Department of Education, Culture and Sports (DECS) in cooperation with the NFA distributed 575 tons or 11,500 bags of 50 kg/bag of iron fortified rice to 45,170 primary grade school children. The children were from 773 schools of 88 provinces of the Philippines. About four (4) tons of iron rice premix was prepared by NFA for this program. Lessons learned: A premix technology that would result to a product with high iron retention and with less hazardous ingredients should be developed. Click here for additional information.
Philippines	WHO/WPRO	Dr. L. T. Cavalli-Sforza; tommaso@wpro.who.int	Data analysis and report writing of two pilot projects (supported by WHO/WPRO) on weekly iron/folate which lasted about 12 months and involved populations of about 30,000 WRA. The support provided for each project was around \$200,000. Click here for additional information.
Philippines	Food and Nutrition Research Institute	Dr. Trinidad P. Trinidad; tpt@fnri.dost.gov.ph; Collaboration with the Swiss Federal Institute of Technology (Dr. Richard Hurrell)	Iron Absorption and Effectiveness of Iron/Vitamin A Fortified Instant Noodles in the Philippines. This Project has three parts: (1) The effect of different iron fortificants on iron absorption from iron fortified instant noodles with and without vitamin A, an in-vitro assessment; (2) Iron absorption from iron/vitamin A fortified noodles with and without sodium EDTA in borderline iron deficient human subjects; and (3) Iron absorption from iron/vitamin A fortified noodles in normal and vitamin A deficient subjects. The third project is being done to determine the effectiveness of the Sangkap Pinoy Seal Product, a Voluntary Fortification Project of the Bureau of Food and Drug, Department of Health, Philippines. This Project will encourage the Industry to fortify their products to help combat micronutrient deficiencies in the Philippines. A project on the effect of different iron fortificants on iron absorption from iron fortified rice will be published this year in the Food and Nutrition Bulletin. Click here for additional information.
Sri Lanka		Dr. Sunethra Atukorala; sunethra@eureka.lk	Children: Evaluation of iron and folate status of primary school children with or without infection and the effects of iron supplementation on iron status, infection and morbidity. Carried out a randomized, controlled, double blind supplementation trial to determine whether daily iron supplementation improves the iron status of children with, or without URTI and reduce the number of episodes and duration of infection. The study population comprised of children seeking treatment at the out patients dept. of the Children Hospital. Also carried out a study to assess the validity of ferritin measurements in dried serum spots. Iron supplementation resulted in a significant improvement in iron status and a reduction in morbidity from upper respiratory tract infections. Click here for additional information.

Sri Lanka		Dr. Sunethra Atukorala; suenthra@eureka.lk	Adolescent girls - iron, vitamin A and folic acid status among adolescent school girls in an urban and a rural area and effectiveness of nutrition education and iron supplementation on iron status. Nutrition education with, or without unsupervised daily iron supplementation was carried out to improve iron status of adolescent school girls of low socioeconomic status. An educational package was developed to highlight the importance of iron, consequences of deficiency and dietary modification to increase intake of more bioavailable sources of iron. Its effectiveness was tested in an urban and a rural setting with a view to implementing it at a national level. The feasibility, compliance and effectiveness of short term unsupervised daily iron supplementation was also assessed. In adolescent school girls, in addition to iron deficiency, low serum folic acid levels were noted in more than a fifth of the girls studied. Education and unsupervised daily iron supplementation were effective in improving iron status of adolescent girls. Click here for additional information. Click here for additional information.
Sri Lanka		Dr. Sunethra Atukorala; suenthra@eureka.lk	Women during pregnancy and post partum: Evaluation of the iron supplementation programme during pregnancy and post partum in the estate sector of Sri Lanka. The national strategy to improve the iron status of women during pregnancy and post partum includes provision of the following at antenatal clinics – iron-folate supplements and ascorbic acid (to be taken daily), and one course of anthelmintic therapy after the first trimester of pregnancy. We studied the availability of supplements and compliance and the impact on hemoglobin concentration and iron status of mothers. The need for educating both health staff and mothers to increase compliance was identified and training programmes conducted for health workers in the estate sector. Unsupervised daily iron supplementation during pregnancy was effective in reducing the prevalence of anemia during pregnancy. Click here for additional information.
Sri Lanka	Pennsylvania State University	Dr. Namanjeet Ahluwalia; nxa7@psu.edu	Recently finished projects in Sri Lanka and Guatemala on filter paper spot ferritin validation show promising results for this assay in field situations. Developing and validating novel approaches for iron status assessment including the spot ferritin method; and on functional outcomes of iron deficiency such as increased morbidity and reduced immunocompetence. A randomized controlled study (iron vs. placebo) to school aged children (5-10 years) with or without infections in Sri Lanka. Oral iron intervention was found to be beneficial in terms of improved iron status and reduced incidence and severity of upper respiratory tract infections. Developed filter paper based spot ferritin method and validated it in field settings in Sri Lanka and in Guatemala. Click here for additional information.
Thailand	Institute of Nutrition, Mahidol University (INMU); UNICEF/MI	Dr. Pattanee Winichagoon; Dr. Anadi Nitithamayong	Efficacy of daily vs. weekly Iron supplementation and follow up 4-6 months postpartum (completed) (UNICEF). Efficacy of iron and zinc supplementation on growth of young infants (completed) (UNICEF). Testing efficacy of fortified instant noodles (in approval process for partial funding) (MI). Relationship between maternal hemoglobin at late pregnancy, with maternal postpartal iron store and hemoglobin of infants at 4-6 months of age (more detailed analysis is being carried out). Click here for additional information.
Vietnam	Project IDEA/ILSI	Sonu Deol; sdeol@ilsi.org; Alex Malaspina; amalaspina@ilsi.org	A randomized, double blind trial was conducted to evaluate the efficacy of NaFeEDTA-fortified fish sauce to improve iron status of anemic women. After 6 months, regular consumption of iron fortified fish sauce improved iron status significantly and decreased the prevalence of anemia in Vietnamese anemic women. Effectiveness trial of NaFeEDTA fortified fish sauce: The objective of the randomized double-blind study is to determine the effectiveness of fish sauce fortified with NaFeEDTA as an effective intervention to combat iron deficiency and iron deficiency anemia in Vietnam. Preliminary results are expected in the second quarter of 2002. Click here for additional information.
Vietnam	WHO/WPRO	Dr. L.T. Cavalli-Sforza; tommaso@wpro.who.int	Data analysis and report writing of two pilot projects (supported by WHO/WPRO) on weekly iron/folate which lasted about 12 months and involved populations of about 30,000 WRA. The support provided for each project was around \$200,000. Click here for additional information.
Western Pacific Region	WHO/WPRO	Dr. L.T. Cavalli-Sforza; tommaso@wpro.who.int	An outline of steps to take to aid in the development of intervention strategies to combat micronutrient deficiency in the Western Pacific Region: 1. Compile available data on prevalence of IDA, IDD, and vitamin A deficiencies for each country in order to identify the magnitude of the problem; 2.) Identify on-going fortification and targeted micronutrient supplementation programs in WPR countries; 3.) Obtain data necessary for identifying possible micronutrient inadequacies in the habitual diets of each country; 4.) Obtain data which will enable appropriate food vehicles for fortification to be identified. The prevention and control of anemia is also supported through the development/implementation/monitoring/evaluation of national plans of action for nutrition in countries of the region (which involve a number of interventions, including the promotion of breastfeeding and of appropriate complementary feeding practices). Click here for additional information.

Region: sub-Saharan Africa			
Country	Organization	Contact	Description of Intervention
Cameroon	Head of Nutrition Unit, Ministry of Health, HKI	Daniel Sibetcheu; ppen@camnet.cm	Conducting a national survey to assess prevalence of anemia. Divided country into five ecological zones and determined the prevalence of anemia among women of reproductive age, children (1-5 yrs of age), and men (18 yrs and older). Also targeted women of reproductive age with children < two years of age and determined the coverage of iron supplementation during pregnancy. Click here for additional information.
Ethiopia	World Vision	Dr. Asrat Dibaba Asrat_dibaba@wvi.org; World Vision	Micronutrient and Health Initiative (MICAH)--working towards the reduction of Vitamin A, iodine, and iron deficiency disorders. The target group are mother and children. Direct and indirect beneficiaries are estimated at 2 million. The main strategies of this program are 1) supplementation-- daily iron to pregnant mothers via community health workers and health institutions. 2) dietary diversification and modification--promotion of growth and consumption of dark green leafy vegetables and poultry. 3) primary health care. 4) IEC. Involved in providing technical assistance during implementation of activities monitoring and evaluation. Also involved in health research and training related to micronutrients. Click here for additional information.
Ghana	CIHR	Dr. Stanley Zlotkin; zlotkin@sickkids.ca	Looked at the efficiency of 'supplefer sprinkles' to treat and prevent iron deficiency and anemia in infants as compared to the standard iron drops that were given. Demonstrated that the supplefer sprinkles are as efficacious as the iron drops. Now also looking at the bioavailability of the iron in the sachets. Bioavailability data in progress. Click here for additional information.
Ghana	USAID/ MOST	Albertha Nyaku; most@ghana.com	An assessment has been developed and used to assess the iron folate supplementation program of the Ministry of Health. A draft strategy framework on the control of anemia has also been developed. An iron folate assessment report will be disseminated among stakeholders and action plans. This is being developed during the first quarter of 2002. A national behavior change communication program on iron folate supplementation for pregnant women is underway during 2002. Consensus building on the control of anemia in children is also underway for 2002. Click here for additional information.
Kenya, Tanzania, Zimbabwe	Uppsala University/Swedish International Development Authority	Professor Mehari Gebre-Medhin; Mehari.Gebre-Medhin@kbh.uu.se	Community involvement; provision of basic health services; braking the evil circle of malnutrition and infection which keeps iron deficiency in orbit; food-based and community-based approaches; simplified methods for early detection, monitoring and evaluation with consideration of specificity and sensitivity; combating confounders; and focusing on groups with special needs. Click here for additional information.
Kenya	UCLA and University of Nairobi	Dr. Lindsay Allen; Lindsay.Allen@mrc-hnr.cam.ac.uk	Effect of supplementation with meat, milk or energy on growth, development, cognitive function, activity and nutritional status of Kenyan schoolers (with University of Nairobi and UCLA). Our part is looking at micronutrient status. Of greatest interest here is the high prevalence of B-12 deficiency (about 40% severe deficiency on average, and 82% had marginal or severe deficiency in some communities) and the fact that either milk or meat substantially reduced the prevalence of severe (<180 pg/mL) deficiency (to 21 and 9% respectively). No other micronutrient status indicators were improved in spite of a very high prevalence of vitamin A deficiency (later confirmed by MRDR tests and pupillary reaction time), zinc deficiency. We are publishing the effect of malaria infection (detected by antigen strips) on micronutrient status indicators, which is substantial. The UCLA team found effects of animal source food supplementation on body composition, cognitive performance and activity. In Kenya, 29% of schoolers were riboflavin deficient. Click here for additional information.
Madagascar	The Manoff Group/MI	Kim Bumgarner; kbumgarner@manoffgroup.com	The development and printing of advocacy booklets and fact sheets on iron, iron deficiency, and anemia for two audiences (global development policymakers and decision-makers and early childhood development (ECD) specialists). The global materials "Iron Improves Life" and the ECD materials "Unlock Every Child's Potential - Iron and Early Childhood" are available from The Manoff Group or The Micronutrient Initiative. Work with MI: Participation in ECD events and meetings to promote reducing iron deficiency in young children. Provision of technical assistance for communications/advocacy on iron to key country programs. Development of a paper on best practices in iron programming for school health programs. Click here for additional information.
Madagascar	Population Services International Madagascar	Shannon McClellan; smcclellan.psi@smicro.mg or cms_psi3.mad@simicro.mg	The project in Madagascar will be launched by the end of 2002. It will include the introduction of a new affordable multivitamin with iron in attractive packaging. There will be both promotional and educational communications campaigns aimed at the target group, accompanying the efforts to make the product widely available on the market. A strategic action plan is currently being developed. In Madagascar, PSI works in several aspects of public health: prevention of AIDS/STIs and unwanted pregnancy; family planning; STI treatment and services; improving maternal and child health (safe water promotion, malaria prevention and treatment, nutrition). PSI Madagascar currently does the social marketing of 5 products and 1 service: condoms, contraceptive pill, contraceptive injectable, long-lasting insecticide treated mosquito nets, a home water treatment solution, and a network of youth-oriented health centers focusing on adolescent reproductive health. In 2002, PSI Madagascar will launch the following products: an STI treatment kit, pre-packaged chloroquine for malaria treatment among children, and a multivitamin with iron. Click here for additional information.
Multiple countries in Africa	MICAH/WV/CIDA	Zewdie Wolde-Gabriel; Zewdie_Wolde-Gabriel@wvi.org	Managed by World Vision Canada and implemented in Ethiopia, Ghana, Malawi, Senegal and Tanzania, the MICAH program's goal is to improve the health and micronutrient status of women and children. It targets over 3.8 million beneficiaries, primarily in rural areas. The MICAH program addresses iron deficiency anemia through multiple interventions of supplementation (iron, folate), fortification, dietary diversification, and primary health care (e.g. prevention and control of hookworm, schistosomiasis and malaria). It also targets vitamin A and iodine deficiencies and builds local capacity to increase program sustainability. Click here for additional information.
Multiple countries in Africa	UNICEF Regional Office for Eastern and Southern Africa	Olivia Yambi; oyambi@unicef.org	Works with 21 country offices- at least four of these have now completed comprehensive anemia surveys (Tanzania, Kenya, Somalia, Zimbabwe) either as stand alone or part of national micronutrient surveys. Regional working groups (which included partners) developed an anemia assessment tool in 1998 which was disseminated to all countries in the region. This was modified for country use. Iron/folate supplementation ongoing in all countries. During 2001 additional supplements made available to Eritrea, Kenya, Malawi, Mozambique and Zambia. Click here for additional information.
Multiple countries in Africa	Helen Keller International	Shawn Baker; hki-africa@aviso.ci	Compiled a summary of all iron-related interventions in Africa. This is attached in a separate spreadsheet. Click here for additional information.
South Africa	MI	Ibrahim Daibes; idabibes@micronutrient.org; Venkatesh Mannar; vmannar@micronutrient.org	Maize and Wheat Flour Fortification in South Africa MI's support to UNICEF and the Ministry of Health for the implementation of a national plan for the fortification of maize and wheat flour with vitamin A, B vitamins, folic acid, iron and zinc continues. Legislation is expected to pass shortly which will mandate flour fortification in the country. The program has the potential to reach 17 million people, providing one quarter of the recommended daily allowances of both iron and vitamin A. Click here for additional information.
Senegal		Dr. Lindsay Allen; Lindsay.Allen@mrc-hnr.cam.ac.uk	We are testing the effects of a multiple micronutrient supplement vs iron, at different frequencies, on treatment of anemia and on psychoeducational performance of schoolers. As in the Kenya project, we are focusing on whether supplementation in children with malaria is useful. Click here for additional information.
Senegal		Mohamed Mansour; mmansour@gnet.tn	With MI and World Bank-- helping a school based iron supplementation program. The first mission in Dec 2000-Jan 2001 was devoted to writing a proposal and a plan of action. Future role would be to provide training/technical assistance at critical points of the projects progress. Click here for additional information.

Region: North Africa and the Middle East			
Country	Organization	Contact	Description of Intervention
Multiple countries	MI/WHO/UNICEF/CDC	Ibrahim Daibes; idabies@mironutrient.org; Venkatesh Mannar; vmannar@mironutrient.org	Wheat Flour Fortification in the Middle East and North Africa: With support from MI, WHO, UNICEF and CDC, ten countries in the Middle East and North Africa have initiated flour fortification programs or are on their way to begin such programs. Egypt and Iran have initiated pilot fortification projects. Other countries that participate in the project are: Jordan, Syria, Oman, Bahrain, Lebanon, Qatar and Morocco. With the World Food Program, support is provided to millers in Pakistan to provide fortified wheat to refugees in Afghanistan. Click here for additional information.
Region: Americas			
Country	Organization	Contact	Description of Intervention
Brasil -State of Goias		Professor Claret Hadler claretheadler@uol.com.br	A cross-sectional study was performed, at a Basic Health Care Unit, with the inclusion of 110 infants. The objective of this study was to investigate mother's knowledge and attitudes, as well as food practices and risk factors for anemia in children aged 6 to 12 months. The methods used were electronic measurements of the complete hemogram, including the RDW (Red cell Distribution Width) and hemoglobin <11 g/dl as cut-off point for anemia (WHO 1968, 1972). The study also evaluated hemosedimentation velocity, serum iron, ferritin, C-reactive protein, and parasitological examination of feces. The findings led to the conclusion that socioeconomic conditions, environmental variables, factors related to the infants' health and intestinal parasitic pathologies did not influence the occurrence of anemia. The higher monthly weight gain, however, and, specially, the infants' alimentary patterns are the main causes of iron deficiency anemia in this age group. Click here for additional information.
Central America	Fogarty International	Dr. Lindsay Allen; Lindsay.Allen@mrc-hnr.cam.ac.uk	Within the next few months I will be leading an effort to study riboflavin, B-12 and folate status in Central America, including more basic studies and leading to potential food fortification strategies. Click here for additional information.
Chile	Roche Vitamins Ltd.	Hector Cori; hector.cor@roche.com	The main activities are in vitamin research and in providing technical assistance in fortification technology and supplement formulation. In particular, we intend to publish a background on the role of vitamins in iron metabolism, based on a paper published by JHU in collaboration with Roche. Click here for additional information.
Canada	Canadian Ministry of Health	Dr. Stanley Zlotkin; zlotkin@sickkids.ca	Looking at First Nation and Inuit populations and testing the dosage of supplefer sprinkles. (Using 30mg rather than the 80mg used in Ghana). Click here for additional information.
Guatemala	INCAP	Dr. Lindsay Allen; Lindsay.Allen@mrc-hnr.cam.ac.uk	1. Vitamin B-12 status of Guatemalan schoolers: prevalence, causes and consequences. This recently-completed joint study with INCAP showed 33% of Guatemalan schoolers in peri-urban Guatemala City to have B-12 deficiency - 11% of them severely. Low dietary intake was one predictor, and elevated serum gastrin levels (caused by Helicobacter pylori infection) were also associated with B-12 deficiency detected by elevated serum methylmalonic acid (but bacterial overgrowth was not). Importantly, B-12 deficiency was associated with impaired neurobehavioral and psychoeducational performance, and poor child behavior. 2. Vitamin B-12 or meat supplementation of young Guatemalan children: the goal is to assess the benefits of meat vs energy vs energy + B-12 supplementation on the growth and development of children. They will be supplemented daily between the age of 12 and 21 months. We have found that B-12 deficiency is already highly prevalent in Guatemalan infants by 3 months of age (mother's milk is very low in B-12 and prevalence is 61% in breast-feeding infants age 7 to 12 months near Guatemala City. Click here for additional information.
Guatemala	INCAP	Dr. Lindsay Allen; Lindsay.Allen@mrc-hnr.cam.ac.uk	In Guatemala we found that 77% of lactating women were riboflavin deficient and that supplementation with riboflavin in addition to iron, produced a significantly higher increase in serum ferritin than giving iron alone. Click here for additional information.
Mexico	MI/IAEA	Juan Rivera Dammarco; jrivera@insp.mx	Current programs include: 1.) Enrichment of corn and wheat flours with iron, Zinc and folic acid, 2.) Distribution of a food supplement containing iron, Zinc, Folic Acid, Vitamin C, Niacin thiamine and Riboflavin to children under 2 years of age and pregnant and lactating women, within the Federal Government program PROGRESA aimed to combat extreme poverty. 3.) Distribution of minerals (Iron and Zinc) and multivitamin preparation to Indian preschoolers and pregnant and lactating women. Preliminary results of the impact evaluation of the enrichment of corn flour is comparing the effects of various iron compounds on iron status, among them Fe-EDTA. A recent concern is the possibility that EDTA may enhance the absorption of lead of groups exposed to lead contamination from glassed pottery. Specific efforts have been enacted to test this possibility. Click here for additional information.
United States	CDC	Emily Bobrow; ebobrow@cdc.gov	CDCynergy is a CD-ROM based tool, created by CDC, which presents a framework for planning, implementing, managing, and evaluating health communication programs within a public health context. The Micronutrient Edition of CDCynergy is designed to expand health communication planning capacity, allowing programs to plan and manage programs competently on their own. It contains a basic planning framework with an action-oriented workbook, in addition to a micronutrient library and specific case examples from micronutrient communication programs throughout the world. The Micronutrient Edition of CDCynergy is unique in the world of health communication planning tools in several regards, since it: 1.) Demonstrates the linkage between descriptive epidemiology, analytical epidemiology, program planning, and evaluation; 2.) Does not assume that communication will be the dominant intervention; 3.) Provides examples of how different countries planned their program, conducted and interpreted formative research, produced media and evaluated results; 4.) Places program documents, international program managers and scientists in a manner that will motivate their counterparts to strive for excellence. Click here for additional information.
United States	USDA	Janet R. Hunt; jhunt@ghnrc.ars.usda.gov	Research directly funded by the USDA Agricultural Research Service: 1. Assessment of adaptation in iron absorption by women in response to dietary iron bioavailability (controlled feeding study recently completed) 2. Determination of iron excretion in men and women, by isotopic dilution, and implications for setting recommended iron intakes (initial data assessed, further work in progress) 3. Evaluation of heme and nonheme iron absorption in heterozygous carriers of the HFE mutation associated with hemochromatosis (initial data assessed, further work in progress) 4. Assessment of the bioavailability of commercial elemental iron powders for use in food fortification (animal study completed, human studies planned). Data from the most recent controlled feeding study indicated that a high bioavailability diet was necessary for women to be able to adjust their iron absorption according to their body iron stores. Click here for additional information. Documents 1 2
United States	SUSTAIN	Liz Turner; lturner@sustaintech.org	SUSTAIN (Sharing U.S. Technology to Aid in the Improvement of Nutrition) has launched a comprehensive evaluation of each of the iron powders in use today in fortification programs worldwide. Initially, each of the iron powders will be evaluated through a series of screening tests. The most promising iron powders will then be evaluated in a human trial to be carried out in mildly iron deficient volunteers. Results from the complete series of studies will be released as they are completed. Initial results from the screening studies will be available in 2002 and results from the human study are expected in 2003. The outcome from these studies will provide the basis for making recommendations on the use of elemental iron powders in food fortification to reduce iron deficiency anemia. Click here for additional information.
United States	WHO/PAHO	Bruno de Benoist; debenoist@who.int	In America, WHO/PAHO is providing technical support in the implementation of several programmes of iron fortification. Click here for additional information.

Region: Europe			
Country	Organization	Contact	Description of Intervention
Sweden	SAREC, TFNC	Erika Matuschek; Erika.Matuschek@fsc.chalmers.se	A Ph D project called "Polyphenols in foods: Effect on enzymatic treatment on iron bioavailability". Erika Matuschek has been working with oxidation of both phenolic compounds in a model food system and with phenolic compounds in high-tannin cereals. The most current study is performed in collaboration with Prof. Lena Rossander-Hulthén at Göteborg University. Researchers will incubate phytate-reduced high-tannin sorghum with polyphenol oxidase and investigate the effect on iron absorption. Click here for additional information.
International Projects, NGOs and Private Sector Organizations			
Country	Organization	Contact	Description of Intervention
	MI/UNICEF/WHO/World Bank/USAID	Faris Ahmed; fahmed@MICRONUTRIENT.org	Will begin the distribution of the long-awaited blockbuster, "Iron Matters" with a premiere at the Berlin SCN meeting in March. It features stories from Ghana, Bangladesh, Chile, Venezuela, and interviews with UN agencies, donors, researchers and government officials, and some ordinary people too! We hope Iron Matters will become a much-used advocacy tool and plan to distribute it through a combination of direct distribution, screenings at conferences, broadcast, and promotion. Our partners in the project (UNICEF, WHO, World Bank, USAID) will assist in distribution; however, the participation and networks of regional partners will play a critical role in our ability to reach the widest possible audience in Asia, Africa, Latin America and Central Asia.
	MI/Tulane University/McMaster University	Ibrahim Daibes; idaibes@micronutrient.org; Venkatesh Mannar; vmannar@micronutrient.org	Double-fortification of Salt with Iron and Iodine. Following the successful development of fortification premixes in the laboratory, a commercial prototype premix formulation for large-scale testing and use is being developed. Field-testing on large-scale commercialization of double-fortified salt will begin shortly in Kenya and Nigeria. Work with Tulane University on the Micronutrient Database Project which, among others, will provide a global map of iron deficiency and anemia prevalence and programs and policies that are in place to control it. Learning about Micronutrient Nutrition- Iron. This is a CD-ROM publication developed with McMaster University and is designed as a training module for health workers. Expected publication date: July 2002. Click here for additional information.
	International Atomic Energy Agency	Dr. G. V. Iyengar; V.Iyengar@iaea.org. Or on the Internet: http://www.iaea.or.at/programmes/nahunet/c4/index.html	The IAEA supports the activities in addressing micronutrients malnutrition through several programmes, including: Coordinated Research Projects (CRPs), Thematic coordinates Research Projects (T-CRP), Technical Co-operation (TC). In many cases, stable isotopes provide the only direct way for gaining information on programmes efficacy and for monitoring nutrition intervention such as fortification and food supplementation programmes. In Chile the government modified its policy for pre-school children nutrition intervention programmes (coverage of ~1.3 million). The study had shown, using nuclear and related techniques, that anaemia was reduced from 30% to less than 5% within a year after using foods fortified with iron and zinc. In 2001, a new T-CRP has been implemented on: "Isotopic and Complementary Tools for the Study of Micronutrient Status and Interaction in Developing Country Populations Exposed to Multiple Nutritional Deficiencies". Click here for additional information.
	INACG	Veronica Triana; vtriana.ilsii.org	INACG will be hosting an international meeting in early 2003 and a regional workshop which will be focused on Africa and have communications as a major theme (2002). Additionally, INACG will have three more publications coming out this year: a brief document on the definitions of anemia, iron deficiency and iron deficiency anemia; a brief document on iron fortificants; and a brief document on adjustments for hemoglobin. Click here for additional information.
	MI	Barbara Macdonald; barb_macdonald@acd-cida.gc.ca	The MI's program focuses on iron fortification of wheat flour and the development of double fortified salt (iodine and iron), which is ready to be tested on a large scale. Click here for additional information.
	CIDA	Barbara Macdonald; barb_macdonald@acd-cida.gc.ca	The iron pots project is a CIDA initiative that will be launched 2002. It will test the cost-effectiveness of anemia control programs (including iron pots). Click here for additional information.
	Project IDEA/ILSI	Sonu Deol; sdeol@ilsii.org; Alex Malaspina; amalaspina@ilsii.org	Current objectives of Project IDEA: Forging partnerships between private and public sectors to combat iron deficiency; identifying appropriate food vehicles and iron fortificants in each country; securing funding for country-specific programs; promoting educational programs to raise consumer awareness; developing ongoing monitoring and surveillance system. Click here for additional information.
	March of Dimes	www.modimes.org	The March of Dimes recommends that you eat a healthy diet, including foods rich in folic acid, and take a multivitamin every day. This is the only sure way to get all the folic acid and other vitamins and minerals you need. Foods that contain natural folic acid include: orange juice, green leafy vegetables and beans. Fortified breakfast cereals, enriched grain products, and vitamins contain a synthetic form of folic acid. It is more easily absorbed by your body than the natural form. What else can I do to ensure a healthy baby? Think ahead. See your doctor or health care provider for a pre-pregnancy checkup. Adopt healthy behaviors before you become pregnant.

Roche Vitamins Ltd	http://www.roche.com/vitamins/what/hnh/vits/folic.html	Folic acid deficiency: during pregnancy may result in premature birth and/or malformation of the offspring. In children, growth may be retarded and puberty delayed. Folate deficiency has also been associated with neurological disorders such as dementia and depression. Groups at risk of deficiency: Folate deficiency is very common in many parts of the world and is part of the general problem of undernutrition. In developed countries, nutritional folate deficiency may be encountered above all in economically underprivileged groups (e.g. the elderly). Reduced folate intake is also often seen in people on special diets (e.g. weight-reducing diets). Disorders of the stomach (e.g. atrophic gastritis) and small intestine (e.g. celiac disease, sprue, Crohn's disease) may lead to folate deficiency as a result of malabsorption. In conditions with a high rate of cell turnover (e.g. cancer, certain anaemias and skin disorders), folate requirements are increased. This is also the case during pregnancy and lactation, due to rapid tissue growth during pregnancy and to losses through the milk during lactation. People undergoing drug treatment, e.g. for epilepsy, cancer or
WHO	Bruno de Benoist; debenoistb@who.int	WHO is maintaining a Global Database on iron deficiency and anemia as part of the Micronutrient deficiency Information System. The database on Iron deficiency and anemia is currently being updated, regional estimates of the prevalence of anemia should be available by end 2002. Technical consultation jointly organized with INACG on the functional consequences of iron deficiency anemia (Belmont, May 21-24, 2000). Proceedings were published in J. Nutr. Vol. 131 No. 2S-II, 2001 (sponsored by WHO and INACG). Another WHO publication: Iron deficiency anemia, Assessment, Prevention and Control: A guide for programme managers, Geneva, WHO/NHD/01.3 Click here for additional information.
	Godfrey Oakley; gpoakley@mindspring.com	There are major consequences of folic acid deficiency: birth defects, heart attacks and stroke, colon cancer, perhaps a contribution to Alzheimer's Disease, and folate deficiency anemia. Folic acid fortification works. It is cheap, safe, and sustainable. US and Canada fortified at 140 mcg/100 g and Chile fortified at 220 mcg/100g. Chile resulted in about 4 times as much folic acid as the US because of flour consumption in Chile is more than the US. NTDs down, homocysteine down, heart attacks and strokes down after fortification. Ideal place for donor money that can show immediate blood level changes, elimination of folate deficiency anemia, prevention of birth defects, reduction of homocysteine, decreases in heart attacks and strokes and probably colon cancer
USAID/DHS	Fred Arnold; arnold@macroint.com	The DHS survey now includes information on anemia and has been collected for 17 countries. Twelve of the 17 surveys are completed and can be accessed via a website (www.measuredhs.com); including specific anemia information on the following countries: India (2000), Kazakhstan (1995), and Peru (in Spanish 1996). A hard copy of iron deficiency anemia in women and children is available for nine countries. Data is broken down by individual country and gives the distribution of anemia status within each country. Also, shows the total percent prevalence of iron deficiency anemia for that particular country. Data includes the target population. Click here for additional information.
ADB/JFPR	Emillie Ballares; eballares@adb.org	Working with several countries under JFPR 9005: Improving Nutrition for Poor Mothers and Children. Click here for additional information. Documents 1 2 3 4 5
FAO	Guy Nantel; Guy.Nantel@fao.org	Information was provided regarding FAO activities; however, it was too large to include in this Annex. It will be available through IDPAS (www.micronutrient.org/idpas/index.html) shortly. We apologize for the inconvenience.