**Message from the Patron**

There is this undeniable fact that malnutrition is a momentous problem confronting a large part of population at global level. And it is a matter of grave concern that Pakistan is a country that is amongst the list of 57 countries all over the world where this issue has risen to a level that some emergency measures need to be put in place immediately to arrest the situation from deteriorating further.

Having gone through the information available on this matter, I have realized as to how important it is to draw a strategy to press further the steps already taken by the Government of Pakistan in realization of the gravity of the matter.

The recent work and plans of SUN (Scaling Up Nutrition) Alliance and Micronutrient Initiative (MI) are praiseworthy in the efforts to control the situation and, similarly the work done by WFP and UNICEF, and NGOs in selected districts to pull it back to some kind of normalcy, however, a comprehensive national level strategy with the technical support of above mentioned actors, will be the key to hold the bull by its horns. I am sure the establishment of Zero Hunger Cell, is a step in the right direction, and this cell will work on producing a comprehensive strategy to tackle the hidden hunger challenges. All contributing entities, departments, and organizations, shall work with the Government, to make it a constant national concern, until the issue is dealt with properly, where not only the public representative, and office bearers, ensure to work hard, but also the general people understand the gravity of situation, and vow their support to fight against malnutrition. We all are very hopeful that, healthy and nourished mothers, girls, and boys, will contribute even greater, in the development of this country, with enhanced learning capabilities.

**Message from the Editor**

We, at 'The Developmentalist', have always been striving to highlight the sensitive and nagging issues from this platform which are in need of immediate attention of our policy makers, enforcers, the opinion makers, and most important the people of Pakistan.

In this issue we have decided to try and create awareness about yet another serious problem our people are confronted with, and that is malnutrition.

This simple word, 'malnutrition' is a multi-faceted problem involving lack of food, bad quality of food, adulteration, hygiene, use of pesticides and fertilizers. What we need to understand immediately is the impact this malnutrition problem is leaving on the whole population, ultimately reflecting on the physical as well as mental growth of everybody, starting from the infants to the grownups, quietly rendering them incapable of giving their full, physically as well as mentally, thus leaving a big negative impact on country's economy.

The Scaling Up Nutrition (SUN) Alliance, which is working in this particular area in 57 countries, is also present in Pakistan and is engaged with all the concerned partners and stakeholders at all levels, the public as well as private. The Micronutrient Initiative (MI) is also hectically engaged in the efforts for over a decade, now, extending much needed and precious support that has already made an impact. However, it is evident that much more and concerted efforts are required to carry forward this vitally important campaign by on one hand engaging the stakeholders, especially food producers, while on the other hand creating mass awareness about the negative impact of malnutrition. For the purpose, while the food producers, from farmers to Industrialists need to be roped in and encouraged to enhance the quality of their produces and products, the general public has to be informed by launching extensive and pointed media campaigns.

We, at 'The Developmentalist' on its 5th Edition have set the ball rolling to create mass awareness by dedicating this issue to highlight the problem.

We hope others to follow the suit!
**Message**

Food Security, and Malnutrition in Pakistan: Consumption of a balanced diet and its effective absorption are paramount to any nation's success. A healthy body leads to well-being of the human mind. Without healthy citizenry, Pakistan cannot produce efficient workforce that is able to drive the country towards the future. Malnutrition prevails since the early days of Pakistan, which in social contexts has been an obstacle towards development. What is critical today is treating nutrition-related diseases, that require comprehensive and costly medical intervention and lifestyle changes, unfortunately significant percentage of Pakistani citizens are unable to meet. At present the status of nutrition in Pakistan is deprived. At the national level, 40% of the children under the age of 5 are overweight. The incidence of nutritional deficiencies is higher in rural areas than urban areas. Cereals and dairy are the highest consumed food groups in Pakistan, whereas consumption of vegetables and fruits is low due to market inefficiencies and seasonal fluctuations. Due to the poor healthcare infrastructure, especially in rural areas, child and maternal health remain weak. A significant reason for Pakistan’s high infant mortality rate is poor nutrition of pregnant mothers and infants.

Malnutrition reduces learning capabilities of children which compromise economic productivity in the long run. Pakistan Vision 2025 targets to reduce malnutrition up to 50 per cent. Federal Government has devised Rs.100 million project on Nutrition in the current PSDP which will coordinate efforts to address malnutrition in federally administered areas including Islamabad, FATA, GB and other down trodden areas. Meanwhile, the Government is committed to be a role model for all the federating units in addressing health related problems including malnutrition. Nutrition programs in all the provinces have also been approved by the Planning commission which are now in the implementation phase. The government in this regard as part of its long-term strategy to cope with the malnutrition issue, plans to establish of Nutrition Center of international standard in a leading university this year. HEC is already working in this direction with further directives to come up with a plan as to how the problem of malnutrition can be tackled by involving academia through research and action. It is a matter of grave concern that the mother-child healthcare indicators of National Nutrition Survey 2011 portray 46% stunting, 15% wasting and 31% underweight of children below 5 years affect their learning capabilities which compromise economic productivity in the long run. We are committed to strengthen our social sector through political ownership. The government has joined UN scaling up nutrition (SUN) movement in 2013 to combat malnutrition based on the principle that all people have a right to food and good nutrition. A Zero Hunger Cell has been established in Ministry of National Food, Security & Research in collaboration with WFP to overcome hunger and malnutrition. While acknowledging the role of poverty as a trigger to malnutrition, the “Vision 2025 encapsulates social protection policy which is aimed at reducing poverty, creating employment opportunities and strengthening marginalized people’s capabilities to mitigate their risk and vulnerability.

**Prof. Alihsan Iqbal**  
Minister for Planning and Development Pakistan

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**Reflections**

Deficiencies in micronutrients - small quantities of vitamins and minerals that the body needs for physical and mental development - are widespread affecting more than half of Pakistan's population especially women and children. Collectively, the micronutrient deficiencies, also called “Hidden Hunger” damage health, harm reproduction, reduce intelligence, eduacability and academic achievement, lower work productivity and occupational choices, and cause death. Reversing adverse trends in nutrition requires appropriate policy direction, political commitment and a concerted effort from all sectors. Food fortification with micronutrients like iron, folic acid, Vit A, B complex vitamins, iodine, zinc etc. is safe, cost effective and the most acceptable solution that is being implemented throughout the world, developing and developed countries alike.

Government of Pakistan is encouraging and patronizing the initiatives for the Food Fortification of major staple foods. To effectively address the issue of micronutrient malnutrition through concerted efforts of all the provinces, partners and stakeholders; the National Fortification Alliance (NFA) was reconstituted and notified in October 2013 under the Ministry of National Health Services, Regulation & Coordination. NFA includes representation from all the federal line ministries, the provincial line departments, development sector organizations, UN agencies, academia, research institutions, Civil Society and industry. The role of the NFA is To provide a forum to the relevant stakeholders to plan, monitor and support the efforts for food fortification at all levels in Pakistan and to establish liaisons with all of them. Being the National Program Manager for Nutrition, I am also the Secretary for NFA Pakistan. After the revitalization of NFA early last year, it was decided in the all Pakistan meeting of NFA to constitute and establish the provincial chapters of NFA keeping in view the devolution of health to the provinces and further improve the coordination and collaboration between the provinces, UN and development partners, stakeholders at various levels and the federal provinces. Provincial Fortification Alliances have been constituted and notified in all the provinces and were launched in an impressive ceremony in May 2016. Though fortification is very simple, easy and cost effective, still there were concerns by the industry about the impact of duties and taxes being imposed by the government of Pakistan on import of vitamin-mineral premixes used for fortification of food. National Fortification Alliance, accepted the challenge and through the concerted efforts of the NFA Secretariat and the Ministry, under the leadership of its minister and secretary, achieved the success which could only be dreamed of a few years ago. Government of Pakistan, exempted all duties and taxes being levied on the import of vitamin-mineral premix used to fortify different foods in the country as announced in the country's fiscal budget 2016-17. The National Fortification Alliance is also taking the leadership in the development of national fortification strategy and fortification standards and building the capacity for regulatory monitoring of the Quality of fortified foods. The document will be finalized by next month. The story of NFA does not end here, NFA is also spearheading the development of National Guidelines for Vitamin A supplementation and after the formulation of National Fortification Strategy, the next step is development of Communication Strategy for Fortification in Pakistan. I do hope that working together under the plate form of NFA, Pakistan would be able to achieve the target of elimination of micronutrient malnutrition very soon.

**Dr. Abdul Basheer Khan Achakzai**  
Director/ National Program Manager  
Ministry of National Health Services, Regulation & Coordination
Scaling Up Nutrition (SUN) is a renewed effort to eliminate malnutrition, based on the principle that all people have a right to food and good nutrition. UN started SUN movement in 2010 and Pakistan joined this movement in December, 2013 as 34th SUN country and up till now 57 countries and three Indian States are member. The movement’s vision is to, by 2030; ensure a world free from malnutrition in all its forms. It is a global push for action and investment, with the support of Governments, organizations and individuals, to help every child, adolescent, mother and family realize their right to food and nutrition, in turn helping them reach their full potential and prosperous societies. Pakistan “National Nutrition Survey (NNS) 2011” was launched in September 2013 revealed that under five children; almost 31.5% underweight, 42.7% stunting, and 15.1% wasting. According to WHO, we are in emergency situation having more than 15% wasting. This emergency situation was declared by our Minister Prof. Ahsan Iqbal when he launched NNS 2011. To overcome the malnutrition along with other countries Pakistan decided to join the SUN Movement in 2013. SUN Movement is led by the Governments and at Planning Commission I am as Chief Nutrition also SUN focal person.

Recently, Dr. Sania Nishtar from Pakistan is selected as one of the SUN Lead Member out of 27 and I am selected as one of ‘Executive Committee Member’ out of 16 which is honor for Pakistan. In the first face to face meeting of Lead Group and Executive Committee released new Strategy and Road Map 2016-2020 held on 21st September, 2016 at UNGA New York. SUN is a Multi-sectoral and Multi-stakeholder Movement works through four Networks (Donors, UN, Civil Society Alliance, and Business). In Pakistan we have established Networks: Government; Donors; UN; Civil Society Alliance (CSA 108 members); SUN Business (SBN 33 Members).

A new Network “SUN Academia & Research Network (SUNAR, Pak)” has been established in Pakistan supported by the Micronutrient Initiative (MI). SUNAR has been acknowledged by the Global SUN Secretariat and other SUN Countries have started to develop this Network. We are also working to establish Networks of Parliamentarians and Media. In order to achieve SDGs 2030, we are creating awareness at all levels particularly with Parliamentarians, policy & decision makers and up-to grassroots level through Civil Society Alliance and Government’s department’s support.

Media’s (both print & electronic, including social media) role is very important to create awareness to change the food habits, to utilize the maximum nutrition without wasting them in over cooking etc. In this regard we are going to revise Food Composition Table and Dietary Guidelines in order to enlighten the public to have healthy lives. We need to aware the public about the first 1,000 golden days — from a mother’s pregnancy to her child’s second birthday, a critical window that can determine a child’s destiny. Good nutrition helps develop strong brains and bodies, allowing this generation the opportunity to not just survive, but thrive, and reach their full potential in life.

SUN believes on this principle that all people have a right to food and good nutrition and we are making all efforts to have healthy and wealthy nation.

Addressing the issues of food and nutrition security i.e. key to improving the human capital development in Pakistan. The 2011 National Nutrition Survey indicated that at the national level, 55% of households are food insecure. Children who do not receive minimum amounts of nutrition in their diets have a significantly higher prevalence of stunting, wasting and micronutrient deficiencies. Nutrition is part of the Sustainable Development Goal (SDG) 2 — Zero Hunger and is a vital component to achieving all the SDGs by 2030.

According to the National Nutrition Survey (NNS) 2011, malnutrition rates are above emergency threshold in Pakistan. With 43.7% children stunted, 31.5% underweight and 15.1% children wasted, which place Pakistan as the second-highest burden country in the region. A combination of factors inter alia: high poverty incidence, rising food inflation, increased unaffordability of nutritious diet resulting in poor diet diversity, low literacy and education in nutritional awareness coupled with weak healthcare service delivery and related structural weaknesses are responsible for the declining/stagnant nutritional status in the country.

Moreover, according to the Minimum Cost of Diet - Pakistan study 2016, 67.6 % or 2 out of every 3 households are not able to afford the minimum staple-adjusted nutritious diet through their current food expenditure to fill their essential nutrition needs. Considering the multifaceted nature of undernutrition, multi-sectoral actions are required to achieve sustainable impact with regards to the reduction in stunting where food/nutrient based interventions play a key role, especially in countries such as Pakistan. Inadequate dietary intake and access to food are one of the immediate and underlying causes of child undernutrition. Food does not only provide energy but is the source of approximately 40 nutrients that the human body requires for appropriate growth, development and health. There is a strong and growing consensus that improving nutrition in young children is one of the best investments a country can make towards its future prosperity. Malnutrition is costing Pakistan’s economy a loss of at least 2-3% of its GDP. Globally nutrition interventions are recognized as the most cost effective interventions in terms of return on investment i.e. US$1 spent on nutrition gives US$16 in return.

Malnutrition in Pakistan cuts across all segments of society. 89% of the wealthiest urban children do not receive the minimum dietary diversity required due to little variation in types of foods, universal food preferences and feeding behaviours. Research shows that nutrition starts with mothers understanding the importance of a varied nutritious diet, particularly during pregnancy through to the first 2-3 years of life. Maintaining good nutrition in the family develops good eating habits which can last a lifetime and break the cycle of malnutrition.

The Government, public and private sectors, humanitarian actors and civil society all need to play a role in educating the most vulnerable, providing access to nutritious foods, especially in the poorest sector of the society, and supporting the behavioural cultural change needed by all people in Pakistan to ensure sustainable, long term change and understanding about Nutrition. Nutrition, especially stunting prevention, will support the achievement of all the SDGs in Pakistan and will have a lasting impact on the economic and developmental indicators of the country.
Commemorating a day like World Food Day every year, reminds us all about the nutritional challenges that most of us face day by day. We can say that with the realization of the gravity of the situation currently Pakistan is moving a step forward in the right direction but it needs coordinated, timely contribution by each one of us to end the hidden hunger. There is a need to break the vicious cycle of malnutrition at each stage of development of human being. Proper nutrition during the embryonic life is critical for a child to be born healthy, if a mother is anaemic or lacks key nutrients in her body, her child will be born in low birth weight or anaemic. This will expose the child to many health problems and his/her survival may be at stake. A child depends on his/her mother even after being born, for at least six months, when nutrition comes from the mother’s milk. Mothers need minerals and vitamins to enrich breast milk. The child needs to be fed properly throughout its childhood, but the first two years are crucial. If a girl child is not fed properly during her childhood, she enters her adulthood being malnourished and when she becomes pregnant she is likely to give birth to a low birth weight baby, hence cycle of malnutrition continues. Therefore, working on nutrition sensitive and specific interventions is right investment in improving mothers and children’s health and nutrition status. I would like to avail this opportunity to request the Government of Pakistan to take the necessary steps towards improving the situation of nutrition in the country particularly by implementing an approved Multi- Sectoral Nutrition Strategy and by increasing the budgetary allocations for all sectors of nutrition. Our parliamentarians need to monitor the investment in the nutrition programs and make appropriate legislation to support the nutrition interventions. Another important step in the right direction will be holding regular meetings of the Infant Feeding Board. The SUN Civil Society Alliance should align their efforts with the National Plan of Action as already approved by SUN unit of Pakistan. Civil Society organizations can integrate nutrition in all interventions at community level. I am thankful on behalf of Micronutrient Initiative to everyone who is playing his/her role in improving the current situation in Pakistan with the support of the Government, particularly the Ministry of Planning Development & Reform, Ministry of National Health Services Regulations & Coordination, the provincial governments for facilitating the civil society organizations, development partners for Nutrition and UN agencies in ending hunger and malnutrition in the country.

Dr. Naseer Muhammad Nizamani
Country Director Micronutrient Initiative Pakistan

NEWS:

Universal Salt iodization (USI) program in Pakistan:
Iodine deficiency disorder (IDD) is still a public health problem in Pakistan with almost one third of the population at risk. In order to meet this challenge, Government of Pakistan, through the Nutrition wing of the Ministry of Health (MOH) Revitalized universal salt iodization (USI) program in 2005-06, to ensure 100% edible salt iodization with the technical & financial assistance of the Micronutrient Initiative (MI) and UN world food Program. MI is providing technical and operational support to salt processors; support to government of Pakistan in monitoring of Salt Processors and equipping labs to perform test on regular basis to ensure adequate iodization. MI is also investing in capacity building of the government staff to implement and monitor the program themselves and data analysis is undertaken by the respective government officials at district and provincial levels. The program has gained substantial results which are reflected in the National Nutrition Survey 2013. Whereby household consumption of iodized salt has increased to 89% in 2001. This has led to a decrease in severe iodine deficiency from 85% in 2001 to merely 3% in 2011. The increased consumption of iodized salt has led to decrease in iodine deficiency from 61% (NNS 2001) to 38% (NNS 2011) among children 6-12 years of age. Iodine deficiency among mothers has decreased to 33% compared to 67% in 2001. In Pakistan, last year overall 484,029 MT of salt was produced by approximately 1482 salt processors. Punjab contribution in salt production was maximum i.e. 72% due to major salt mines which are located in Punjab. KP contribution was 16% whereas Sindh and Balochistan/A&K contributed 11.6% and 1.09% respectively in total salt production. According to GPO and MI Monitoring data 2015, 59% of total production was adequately iodized which was 60% in 2014. This trend is improving further through Government support at district, provincial and national level. Iodine Deficiency Disorders (IDD’s) has many manifestations and include: abortion, fetal brain damage, cretinism, stillbirth, neonatal goiter, child goiter, neonatal brain damage, loss of energy, impaired school performance, retarded physical development, adult goiter with complications, loss of energy among adults, diminished productivity and impaired mental function. The most cost effective solution to avoid this deadly aftermath of Iodine Deficiency, is to consume the required daily iodine level in the form of Iodized Salt and this only possible by enacting legislation on Compulsory Salt Iodization for human and animal consumption.

Dr. Ahsanullah Khan Bhurgri
National Program Manager LSF
The Micronutrient Initiative

Diarrhoea remains a leading cause of death among infants and young children, accounting for 18% of child deaths and 13% of all disability-adjusted life years (DALYs). Childhood diarrhea is a major cause of child mortality in Pakistan; each year, 53,300 children under five die due to inadequate diarrhea treatment. As per the Pakistan Demographic Health Survey (PDHS, 2013), 23% of mothers reported that their children suffered from diarrhea in the past two weeks. The survey showed that even though 61% of the children who were suffering from diarrhea consulted a healthcare provider, only 46% received any form of increased fluid intake including oral rehydration therapy and home fluids and only 1.5% received zinc supplements. According to the Pakistan National Nutrition Survey 2011, only 6% of mothers had any knowledge about zinc, 13% in urban areas and 3% in rural areas. The WHO and the United Nations Children’s Fund (UNICEF) released a joint statement to decrease diarrhea deaths among the world’s most vulnerable children. This statement recommended two simple and inexpensive changes: i) the switch to a new lower osmolarity formulation for oral rehydration salts (ORS) that reduces the need for intravenous fluids and shortens the duration of the episode and ii) the introduction of zinc supplementation for 10–14 days, as an adjunct therapy that decreases the duration and severity of the episode and the likelihood of subsequent infections in the 2–3 months following diarrhea. MI designed a diarrhea management project based on the WHO recommendation and is supporting Pakistan Zinc + Low Osmolarity ORS & community awareness. Furthermore advocacy at national & provincial level is also part of the project implementation strategy. In the next phase the project implementation strategy will be reviewed gaps identified beforehand scaled up to 5 more districts in Punjab.

Dr. Khalid Nawaz
National Project Manager Child Survival & Development
The Micronutrient Initiative
Pakistan is a third world developing country with an overwhelming population and limited resources. Non-accessibility to drinking water, scarcity of appropriate nutrition, improper sanitation, poor socioeconomic conditions and political instability are some of the factors hindering progress in the country. The country is rich in food as it is high in agricultural productivity; however, dispersing of these to population is disproportionate. Inflation in prices and taxes on products is making it difficult for the general population to make both ends meet. This is leading to rampant malnutrition including micronutrient deficiency like iron, iodine, vitamin A, vitamin D among inhabitants, especially children and women. Many governmental and non-governmental organizations are working towards fighting against this hidden hunger of micronutrient deficiency. Government initiated lady health visitors render health education through outreach services, trained birth attendants play their role in combating with maternal health. Few projects and programs are worth mentioning that assisted in overcoming deficiency states among marginalized cadre. Polio plus campaign ran across the country where children under five were offered vitamin A supplementation. Tawa Radio Pakistan targeted school going girls in rural areas of the country in providing balanced nutrition to the underserved. The well known “handi wala namak” (iodized salt) has brought striking progress, a drastic decrease in iodine deficiency. Vitamin D deficiency is also prevalent; however, there are no active programs. A landmark achievement is preparation of growth centile charts for Pakistani school going children under High Education Commission published in Journal of Pakistan Medical Association in 2012, which has highlighted stunting and obesity nationwide. These two parameters are often overlooked as they are not considered part of malnutrition. Non-governmental organizations and institutions are playing their role in combating with micronutrient deficiency and malnutrition. Micronutrient initiative will prove to be a milestone in Pakistan focusing on iron, iodine, vitamin A supplementation. It is high time to invest in balanced diet and proper nutrition for the growing nation, who are the future pillars. A healthy nation can build and lead the country towards progress and success.

Dr. Qudsiya Anjum
Specialist Family Medicine, Dubai, UAE
Associate Editor, Journal of Pakistan Medical Association

Article on Micronutrient Deficiencies - A Call for Action!
Malnutrition is one of the biggest development challenges facing the world. Over 2 billion people lack the essential vitamins and nutrients needed to grow and live healthy lives. Pakistan also carries a very high burden of micronutrient malnutrition.

The most critical deficiencies include iron, iodine, zinc, folic acid and vitamin A and D. According to National Nutrition Survey (NNS) 2011, about 51% of women in reproductive age are anemic and 37% are iron deficient. Similarly, 62% under five children are anemic and 43% are iron deficient. NNS 2011 also states that 66.8% women of reproductive age, 68.9% pregnant women and 40% children are vitamin D deficient. While 42% non-pregnant, 46% pregnant women and 54% children are vitamin A deficient. For decades, the lack of micronutrients has been known to cause the anemia, cretinism, blindness, and rickets that afflict many millions in Pakistan including women and children. The NNS 2011 confirms that maternal and child under nutrition is still a major issue for Pakistan in all its dimensions and alarmingly high percentage of households (58.1%) in Pakistan are food insecure. Undernourished women are at a greater risk of dying from pregnancy complications compared to well-nourished women and have a higher risk of delivering low birth weight babies. Their children are at higher risk later in life of physical and cognitive impairments and nutrition-related chronic diseases. Unfortunately, this situation has not improved for the last four decades rather some indicators have gone worse. Furthermore, these micronutrient deficiencies do not only have adverse effects on the quality of people’s lives but also result in significant developmental and social consequences. They trap communities and whole societies in a vicious cycle of poverty. Malnourished children are unable to learn and reach their full potential, while adults remain less productive. While even stunting is a result of malnutrition in the first five years of a child’s life, and limits physical, emotional, social and cognitive development. Currently 44% under five children in Pakistan are stunted. Pakistan is losing 2-3% of GDP annually as a result of malnutrition. Malnutrition reduces 13 to 25 IQ points in young children while stunting causes up to 46% loss in earning in later years of life. According to the World Bank, improving nutrition contributes to productivity, economic development, and poverty reduction by improving physical work capacity, cognitive development, school performance, and health by reducing disease and mortality. It is therefore imperative to address micronutrient malnutrition to achieve economic and social targets including the sustainable development goals in the country.

Combating micronutrient deficiencies through effective policies and targeted nutrition intervention strategies can bring significant health benefits for people, thus positively impacting their local economies. Vitamin and mineral deficiencies have been largely brought under control in the developed world while developing world still needs to address this menace. These vitamin and mineral deficiencies can be controlled by using interventions that have been tried and tested worldwide. These techniques include diet diversification, supplementation and fortification.

Food Fortification of staple foods is a successful public health approach that has been widely used and continues to evolve. In Pakistan, the fortification of wheat flour with iron and folic acid and edible oil/ghee with vitamin A&D presents a great opportunity and would help to control the hidden hunger from our population. One successful example of Food Fortification in Pakistan is the Universal Salt Iodization (USI) Program, which was implemented by Micronutrient Initiative along with provincial and federal government departments and nutrition development partners. USI has made considerable progress for iodine deficiency disorder (IDD) control in Pakistan. According to NNS 2011, severe iodine deficiency among women has decreased from 37% to 3% and among school aged children from 23% to 2%. There has also been a significant increase in household utilization of iodized salt from 17% in 2001 to 69% in 2011. With funding from UK Government’s Department for International Development (DFID), Micronutrient Initiative and Mott MacDonald have initiated the world's largest Food Fortification Program (FFP) in Pakistan. The overall objective of the programme is to contribute to improved nutritional status of the people of Pakistan, particularly women of child bearing age and children. The FFP will achieve this through sustainability
improving availability and consumption of fortified wheat flour with at least iron and folic acid and edible oil/ghee with vitamins A & D. Under this program, commercial wheat flour and edible oil/ghee mills will receive support to buy fortification material/equipment to fortify wheat flour and edible/ghee in Pakistan. Other components of the program include technical support to the Government’s food fortification regulatory system, support for awareness raising and generating evidence to formulate relevant policies to combat malnutrition in Pakistan.

In order to combat micronutrient malnutrition and improve food security; Pakistan needs to involve all relevant sectors including agriculture, education, the food industry, health and other social sectors, to ensure that adequately nutritious diets are available and accessible to enhance the food and nutrition security for the people of Pakistan. Pakistan also needs to rely on other key proven interventions such as promotion of optimal breastfeeding practices; age-appropriate complementary feeding; and interventions to ensure sufficient intakes of key vitamins and minerals in the diet.

In light of the highlighted circumstances addressing malnutrition is one of the best investments Pakistan can make for securing its future because good nutrition is essential for a child’s healthy growth and development, their capacity to learn and be productive, and be a part of a modern economy without being left behind.

As the idea behind fortification isn’t to “cure” micronutrient deficiencies, rather it’s to prevent deficiencies and move people and whole population towards consuming recommended amounts of fortified foods.

**Dr. Tausif Akhtar Janjua, Technical Director, Food Fortification Programme**

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**Article on Maternal and Child Anemia: the neglected health impasse:** Anemia is widely prevalent, mostly known but fails to seek the kind of public health attention it merits. Around 1.62 billion people globally (developing and developed countries) are affected. Iron deficiency is the commonest form of anemia. The iron deficiency anemia (IDA), alone is responsible for around 100,000 maternal and almost 600,000 perinatal deaths each year. It bears the consequences for generations in terms of poor pregnancy outcomes for both mother and newborn, increased risk of infant mortality, premature delivery, low birth weight babies, and reduced cognitive abilities in children which can lead to poor school performance in the later years.

WHO in 2011 reports that roughly 43% of children, 38% of pregnant women, and 29% of non-pregnant women and 29% of all women of reproductive age have anemia.

Anemia results in lethargy (reduced energy levels) and it can affect productivity and earning power of the individual. It also results in less productivity; women not only find difficult to do household chores but cannot take good care of their young ones. There is an obvious economic loss attached; due to IDA alone and is estimated to be approximately at $0.32 per capita or 0.6% of GDP.

The blood loss during menstruation, repeated pregnancies (closed birth spacing), socio-gender inequity and household poverty for women while, low iron stores (born to malnourished mothers), repeated illness (bottle feeding, diarrhea etc.) poor dietary diversity during weaning and later years, worm infestation (especially hook worms), malaria etc. contributes to anemia in children.

Pakistan in a backdrop of lacking performance against the MDG's targets carries the baggage of high prevalence of maternal and under 5 anemia. The situation has actually worsened over the years. The moderate anemia has increased from 27% (2001) to 49% in 2011 for non-pregnant women and 36.9% to 49.3% for pregnant women in the similar time bracket. Meanwhile, it rose to 56% in 2011 against 47.3% in 2001 for children under 5 as well. The government though provide iron folate acid tablets free of cost at the facility and the community level (through LHWs), but there are issues with coverage and availability.

The irony is that 50% of women, who are provided with IFA during pregnancy, are not taking it. The poor compliance is greatly linked to lack of counseling and follow-up by the healthcare providers, poor packaging of the tablet, GIT side effects and various myths which are linked to taking any kind of tablets during pregnancy. Meanwhile less than 3 percent are actually taking the anti-helminths during pregnancy. It is worth noting that pregnancy safe anti-helminths (Mebendazole) are not manufactured locally. They are internationally procured and distributed by UNICEF during the Mother Child Week; twice a year in the LHW’s covered area.

The dietary patterns, cooking techniques, eating habits and food choices also reveal that iron rich foods are not taken adequately. The traditional habit of eating bread (paratha, Chapati, roti) along with tea or consuming tea soon after meals is also preventing availability of free iron in the blood.

The obvious gap (demand & supply) in terms of availability of iron folate acid for pregnant lactating women (PLWs) at community and facility level, poor compliance, inadequate counselling and follow up by the healthcare providers, poor dietary diversity, eating habits and lack of focus on adolescent girls anemia to break the inter-generational cycle of anemia is contributing to poor maternal health outcomes. Repeated pregnancies and inadequate spacing is largely contributing to this long standing health issue for the women in the country. No program focused on Anemia Prevention and Treatment would work unless the Stakeholders working in Family Planning Programs are taken on board.

Pakistan has committed to new health & nutrition related global targets by signing the Sustainable Development Goals. It has been highlighted by the experts that maternal anemia is one of the outstanding health issues which is leading to insistent status of nutrition for both mothers and children. A large scale food fortification program; fortifying wheat flour with iron and folate acid has been initiated in the country this year. It is backed up by behavior change communication program for the communities as well. Availability of IFA supplements for all women of child bearing age groups should be the target for the government and partners. Adolescent anemia must be addressed in terms of raising awareness among young girls, community screening and treatment of anemia for the future mothers.

We must realize that anemia unless prevented and treated can prove to be a major contributor to yet another under-achievement in the context of global commitments. Let us address the issue inside and outside the health system to break the vicious trap.


**Dr. Asma Badar**, National Manager, White Ribbon Alliance Pakistan
Micronutrient Initiative Pakistan

Micronutrient Initiative Role in improving health and saving lives of millions of women and children

Nearly 37.5 million people in Pakistan experience malnutrition—and its consequences—every day. Young children especially suffer the effects of malnutrition, with 40% of children under the age of five classified as underweight. Since 2000, the Micronutrient Initiative has been working in Pakistan to improve the health of vulnerable people, especially women and children, through better nutrition. Our priorities focus on improving access to needed micronutrients for the most disadvantaged, from supplementation and fortification to policy changes and advocacy efforts. In addition, MI works closely with federal and provincial government to strengthen nutrition policy and improve multi-sectoral coordination through the Scaling Up Nutrition (SUN) movement.

Impact

Over the past 16 years, MI has successfully implemented and scaled-up nutrition programs in Pakistan. These programs have made a significant impact to help improve the nutrition and health of the people of Pakistan, especially with regard to salt iodization, flour fortification and vitamin A supplementation. In providing technical and financial support to federal and provincial Department of Health and Nutrition, and Department of Food, MI and partners have made a difference in the lives of millions of men, women and children. MI’s work has been supported through the generous support of Global Affairs Canada (Government of Canada), DFID, WFP and other agencies.

Vitamin A to improve child survival

In order to help the government improve child survival rates, MI has delivered one billion doses of vitamin A, and counting, since the start of our vitamin A program in Pakistan. Currently, 96% of young children between the ages of 6-59 months receive annual vitamin A supplements, which boosts their immune systems to help fight off childhood diseases and prevents nutritional blindness. MI continues to support the government in its efforts to scale up vitamin A supplementation program by providing technical support as well as monitoring and training.

Salt iodization to reduce iodine deficiency disorders across the country

Starting in 2006, MI has worked with the government, salt industry and other key partners to support universal salt iodization in Pakistan to reduce iodine deficiency disorders. Almost 70% of edible salt produced is adequately iodized through support from MI. Over a number of years, there has been a significant increase in household use of iodized salt: from 17% in 2001 to 69% in 2011, resulting in a decrease in severe iodine deficiency disorders (IDD) in mothers, school-aged children and newborns: from 37% in mothers in 2001, reduced to 3% by 2011; and 23% in school-aged children, reduced to 2% during the same timeframe.

Food fortification to reduce anemia in women and children

Fortification of wheat flour with iron and folic acid—as well as edible oil/ghee with vitamin A and D—provides needed vitamin and minerals to improve nutrition, especially for women and children. MI was the organization which initiated wheat flour fortification in Pakistan, beginning with a research study in 2002. MI continues to play an important role by providing technical and financial support to the Government of Pakistan and other partners for wheat flour fortification—see below.

Food Fortification Program (FFP)

The newly launched Food Fortification Program is one of the world’s largest fortification programs and was developed to combat micronutrient malnutrition in Pakistan. MI is the lead technical agency for the FFP, which includes providing technical and financial support to commercial wheat flour and edible oil/ghee mills. MI’s support facilitates the purchase of materials and equipment required to fortify wheat flour and edible oil/ghee in Pakistan, the provision of technical and financial support to relevant government ministries and departments and commercial wheat flour and edible oil/ghee mills. Support will be provided to apply quality control procedures at both the production and market levels to ensure adequate fortification. FFP is being implemented in Lahore and Islamabad districts of Pakistan, covering all wheat flour and edible oil/ghee mills.

Over the next five years, the program will gradually expand to cover every commercial mill in Pakistan: 1,082 wheat flour as well as 102 registered edible oil/ghee mills.

Scaling Up Nutrition (SUN)

The Scaling Up Nutrition (SUN) Movement connects public and private sector stakeholders to improve nutrition around the world. MI supports the SUN Movement in Pakistan by hosting the Secretariat for the Scaling Up Nutrition Civil Society Alliance (SUN CSA), the SUN Academia and Research Network (SUNAR, Pak), and by co-convening the SUN Business Network. MI has trained and built the capacity of more than 100 civil society organizations in nutrition advocacy and these organizations are involved in awareness raising and behavior change communication at grassroots level.

MI also supports the SUN Secretariat in Punjab to ensure the development of nutrition-sensitive action plans across sectors and advocates in collaboration with SUN for national and provincial governments to increase spending on nutrition. Since joining the SUN Movement in 2013, Pakistan has made significant progress in implementing its nutrition agenda. SUN has helped coordinate members, mobilize and share resources and encourage collaboration toward a cohesive nutrition agenda both within Pakistan and internationally. Nutrition has now become a focal point of Pakistan’s Vision 2025 with high-level political support for the issue. MI is working with parliamentarians on the implementation of multi-sectoral nutrition strategies and collaborating with national media to increase understanding of the impact of malnutrition.

Technical Assistance for Nutrition (TAN)

Through N-TEAM, MI is providing technical support project to SUN, and via the Technical Assistance for Nutrition (TAN) project, funded by DFID, MI is supporting the Government of Punjab by providing:

- A short term consultancy to facilitate the development of a provincial multi-sectoral plan of action for nutrition.
- A three-year consultancy with the Punjab province to support planning, coordination and surveillance.

Future forward:

MI is currently expanding its support in Pakistan to include new approaches to strengthening health and nutrition initiatives and providing communities with access to improved nutrition:

ENRICH: enhanced nutrition services to improve maternal and child health

MI’s newest collaboration with World Vision, the ENRICH program, funded by Global Affairs Canada, seeks to reduce maternal and child mortality in Pakistan, Bangladesh, Kenya, Myanmar and Tanzania by addressing issues critical to the health of pregnant women, newborns and young children. Pakistan has a high rate of anemia among pregnant women and infants with low birth weight.

The ENRICH program will investigate the cost-effectiveness of supplementation in pregnant women in Pakistan. The program will also research the most appropriate channels and platforms to engage and empower men in important nutrition issues.
THE DEVELOPMENTALIST

RIGHT START
MI's global Right Start Initiative is a multi-faceted initiative with improved nutrition through five strategic pillars:
- High impact programs
- Resource mobilization
- New strategic partnerships
- Technical leadership, evidence and action
- Advocacy

The Government of Canada is supporting the Right Start Initiative, which is being implemented in nine countries in Asia and Africa: Bangladesh, Ethiopia, India, Indonesia, Kenya, Pakistan, the Philippines, and Tanzania. The Right Start initiative in Pakistan will benefit pregnant women, newborns and young children.

Why we have to celebrate World Food Day?
On 16th October each year people around the World come together to commemorate a day of action against hunger and pledge to eradicate hunger in our life. To mark the World Food Day, Micronutrient Initiative reinforce its commitment to raise awareness, engage with multi-stakeholders and technical experts to end hunger in our lifetime. Because we have solutions for hidden hunger and our programs are designed in a manner to improve nutrition status of women and children. Climate is changing. Food and agriculture must too— is the theme of World Food Day – 2016 and we are much aware that climate change has become the major issue food security in all over the World and Pakistan is also suffering from its impacts in different regions and being hit by hardest by higher temperatures and increasing frequency in disaster related to change in weather. At the same time the population of Pakistan is growing steadily, it is expected that Pakistan would having a population of 2.2 billion in 2030. To meet the needs of food we should align our agriculture and food system with the adverse effects of climate change and we should have a resilient and sustainable productive system.

Sources: United Nations and FAO estimates

NEWS SECTION

4 Days residential course on “Social Mobilization” – invest into your frontline staff

January 9-12, 2017
It’s an invaluable opportunity to transform skills and effectiveness of your social mobilization team, by opting for this time tested course, designed and delivered by professionals and practitioners with over two decades of Social Mobilization experience.
For registration and details on: venue, fee, and discounts, send your queries at info@hrc.org.pk

4 days course on Project Cycle Management and Results Based Management — groom your managers!

January 16-19, 2017
The best in class course, to sharpen skills of your managers and future leaders. Our trainers have two decades of experience in working with leading international organizations and UN agencies at senior levels.
Not only the trainers explain the theories of project management, but they also dive in with you for a matchless experience of real life case studies from different development and humanitarian projects being implemented around the globe. We promise for an international standard course, by Gurus of Project Management.
For registration and details on: venue, fee, and discounts, send your queries at info@hrc.org.pk