

WORLD FOOD DAY

Family farming can help unleash the power of nutrition

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THE theme of World Food Day 2014 is "Family Farming: feeding the world, caring for the earth." Family farms are at the heart of Bangladesh life, they are both an economic and social force. While Bangladesh has made great strides towards the Millennium Development Goals, eradicating extreme poverty, improving education and reducing child and maternal mortality -- undernutrition remains one major unfinished agenda.

Addressing the nutrition challenge requires coordinated action across a range of sectors -- health, agriculture, water and sanitation. Among these efforts, an increased focus on family farming is one way to help tackle undernutrition. Family farming activities -- such as home gardening and poultry rearing -- increase the availability of diverse and nutrient-rich foods, and ensure sustainable household income and empowerment for women in Bangladesh. These approaches help children, their families and communities get the nutrients they need to develop healthy, strong bodies and minds.

Good nutrition in the first 1,000 days of a child's life -- from a mother's pregnancy through to a child's second birthday -- is the key to a child's future. This time period is critical for proper brain development and physical growth and is a unique window of opportunity that can give all children the best possi-

ble start in life.

However, for many children, this window has been closed.

Fifteen year old Nahid from Satkhira was married before the age of 12. She is now the loving mother of three sons. She and her children suffer from chronic undernutrition.

"I am not able to eat on a regular basis," she says, visibly distressed. "Sometimes, I cannot stand up."

She is drained of energy and struggles to raise her children. The family's poverty, her premature motherhood and her weakened state have made it a challenge to nourish and nurture her three boys.

Fuelling these challenges are community myths which create misconceptions around the right foods to feed children. "Our village people said that if your child eats bottle gourd or spinach he or she will face colds and allergies," Nahid says. But spinach is commonly regarded as a rich source of nutrients and bottle gourd is rich in minerals.

Compounding the situation for Nahid is her limited authority to make decisions in the household.

"What my husband buys is distributed first to him and the children and sometimes there is no food left. That's the reason why I feel weak, distressed and suffer from palpitations. My newborn had pneumonia, is not getting enough breast milk from me and is undernourished. If I ask my husband to go shopping he will say: 'I have no money, how will I buy these things?' He gets angry and conflict happens in

the family."

Nahid's story highlights the complexity of undernutrition and the importance of good nutrition through the life cycle. If a baby born to an undernourished mother has a low birth weight, then the baby is undernourished at birth and has a higher risk of developmental and health problems. These consequences are irreversible.

Families like Nahid's with limited income often cope by eating cheaper, less nutritious food. However, an increased focus on homestead gardening and poultry rearing can increase a family's access to more diverse foods and thus help provide essential energy and nutrients.

With the right variety of nutritious foods, a hygienic living environment, and with good care -- such as exclusive breastfeeding for the first six months -- there is a lifetime of benefits for children, including stronger immune systems, better school performance and greater potential to earn. This allows them to contribute more to the economic and social development of their family and their nation. Investing effectively in nutrition is essential for increasing economic productivity and experts agree that every \$1 spent on improving nutrition can have a \$30 return on investment.

While diverse food production and consumption are important, they are not the whole solution to improving nutrition. Ending child marriage and delaying young pregnancies can help break the intergenerational cycle of low birth weight and chronic malnutrition.

Improving access to health services, safe drinking water and a clean environment can reduce disease and infection and ensure that women and children stay healthy. Improving the practice of hand washing before feeding a child is also key. At the core of all our efforts, women must be empowered to be decision-makers in their families and communities, leading the way to a healthier and stronger nation.

In Bangladesh today, the undernutrition situation is a persisting development challenge: 41%, or approximately seven million children under five, are stunted (too short for their age). Among women, 24% are underweight which increases the likelihood that their children will also be stunted. Thirty-three per cent of girls have begun child bearing when they are still children themselves (by age 17).

On World Food Day, we recognise the importance of family farming; and the progress that has been achieved in reducing undernutrition but acknowledge that, for families like Nahid's, progress is too slow. We reaffirm our commitment to working with the government, scientists, academics, civil society, the media and private sector to champion good nutrition for all. By working in collaboration, we can unlock the power of good nutrition and scale up effective solutions, such as family farming, to ensure the people of Bangladesh can reach their full potential.

The authors of this joint opinion piece are the Country Representatives of FAO, UNICEF, WFP, WHO, respectively.

Concentrating on family farming and technology

SHYKH SERAJ

SCIENTISTS' role in ensuring global food security is evident. The world's most renowned rice scientist and the father of hybrid rice, Yuan Longping, has ensured food security for the highest populated country of the world, China. In a developing country like Bangladesh, there have been contributions from many scientists, including the greats like Dr. K.M. Badruddoza, Dr. Hasanuzzaman, and Dr. Noor Mohammad. Their persistent research endeavour, initiatives from extension workers at field-level and, above all, the valuable labour invested by our farmers could ensure food security for this agrarian country. To achieve the impossible, a scientific process has worked like a force behind this success.

I remember what father of hybrid rice Yuan Longping said to me: "A government that focuses on science and technology will certainly move that country forward." The research has to be in the field, or else there will be no result. Green Revolution was a success through which food security was ensured for the ever-increasing population of the world. It was a revolutionary advancement. It clearly proves science and technology have always played the most vital role in the expansion of agricultural civilisation.

During March-April this year, I had the privilege to visit Rwanda to attend the 2nd Global Conference on Biofortification. I had the opportunity to meet world famous agricultural scientists and agropolicymakers. I met the 'Indian Father of Green Revolution,' Dr. Swaminathan. During an exclusive interview he said: "Yes we're adding vitamins in the crops and vegetables, but the soil has no nutrients." "We've made the soil infertile due to heavy use of chemical fertilizers and it has now lost its nutrients," he added. "As long as we can't make the soil nutrient-rich, no efforts will work. If there is no soil, how can there be produce," said the legendary geneticist.

In 1970, Bangladesh had about 9.7 million hectares of cultivable land for nearly 70 million people. Bangladesh back then used to import around 2 million tons of rice. Now, land has decreased drastically, some say it's 8.5 million hectares, and some say it's below 8 million hectares. According to the Department of Agricultural Extension it's over 9 million hectares. The population has more than doubled after liberation, but the country has seen threefold increase in food grain production. We didn't only become self-sufficient in food grain production, but also gradually started exporting our rice. It was possible due to internationally accredited research, evidence-based policy and timely farming-friendly initiatives.

The world is now at a state of stable food security. Yes, there is extreme hunger and poverty in underdeveloped countries of the African continent. However, the overall poverty across the world came down quite impressively. World Food Day is being observed across the globe with the main theme, 'Family Farming: Feeding the world, caring for the earth.' The theme clearly states the present need is different. There are many significant issues which are already attached with the concern for food security. Almost two billion people of the world are faced with hidden hunger, which means they suffer from malnutrition. We have seen diversified research initiatives to tackle this major concern, the scene is still unchanged. It is said that if a child is faced with nutrition deficiency during its first two years, it will be impossible to make up the deficiency. Globally, GDP comes down by 10% as a result of nutrition deficiency.

On September 29, I was invited as a panelist on IFDC's 40th Anniversary held in Washington D.C. to take part in a discussion on global food security and how technology can be an effective aid. The world is looking at the global agricultural issues with common objectives. The importance of nutritious diet, soil health and other issues were discussed by the panel. In the past, we focused more on the increase of production. Because of this, the soil has lost its inner strength, or the organic matter. To bring back these vital ingredients, global policymakers, researchers, extension workers and media professionals agreed on the same goal and committed to work hand in hand. Bangladesh was represented as a role model in the discussion. At the same time, the efficient application of guti urea (Urea Super Granule) by our farmers was also discussed. Returning organic qualities to the soil would be the best achievement, and that is the prime demand.

Bringing down the production cost, ensuring fair price for farmers and development of livelihood status are three major areas to concentrate on. This is where the issues of technology, indigenous knowledge and science come in. It takes 50 kgs of urea to produce rice from one bigha land, this but amount can be reduced by two-third by using USC. If farmers use Leaf Colour Chart they can measure what amount of urea fertilizer they actually need in the field. By doing this, they can reduce the use of fertilizer hugely. The question is why are these technologies not spreading across the world? The demand can be cut to half if the advanced technologies are properly implemented. If that is done, first of all, production cost will come down. With it, soil and environment will remain healthy. Carbon emission can also be reduced. To keep the fertilizer elements active in the field, farmers use more water. Methane is produced through this process. Methane and carbon dioxide are very harmful for the environment and climate. Advanced, effective and cost saving technologies are keys to achieving a healthy environment and a constructive farming sector.

Family farming has been valued as the most important issue in this year's World Food Day. Across the world, the heritage of family farming is becoming extinct. Many of the ancient farming families are leaving the tracks of their forefathers and moving to non-farming professions. Most of the land owners in Bangladesh are stepping away from farming. Those who are cultivating are sharecroppers. However, there is no alternative but to bring back the true heritage of farming -- and that is family farming. The government must take special measures to give more incentives to family farming. If there is no family farming, there will be no agricultural culture in future, which will eventually affect food security.

Considering all these, the United Nations has announced 2014 as the 'International Year of Family Farming.' Family farming, reviving soil quality and protecting it, giving more importance to nutrition are the most vital challenges ahead of us, and if we don't achieve those we can never be able to achieve 'food security,' 'safe food' and 'healthy world' in reality.

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How far is Teesta water sharing agreement?

M. INAMUL HAQUE

BD ANGLADESH Foreign Minister A.H. Mahmood Ali and his team recently met with his Indian counterpart Sushma Swaraj and other Indian officials in New Delhi. A 36-point joint statement on the meeting, called 'Joint Statement on the Third Meeting of the India-Bangladesh Joint Consultative Commission,' was issued on September 20. The statement referred to the Teesta and Feni River water sharing problems in its Article 24, and called for the finalisation of the Interim Agreement. Does it mean that the Teesta water agreement is not far?

Bangladesh Water Resources Minister Ramesh Chandra Roy demanded 50-50 distribution of the Teesta water at Gazaldoba point in the 37th meeting of the Joint Rivers Commission in Delhi. At that time he expressed satisfaction at getting 3,500 cusec of water without asking, and said that it could be increased through talks (The Daily Star, March 18, 2010). In January 2011, after a secretary level meeting, it was in the air that the Teesta water sharing agreement was imminent, with the formula of dividing the flow 50-50, keeping aside 20% of the total flow for the river. But the Hasina-Mannohan Summit in Dhaka on September 7, 2011, ended with no agreement on the Teesta water. It was reported in the media that Paschim Banga Chief Minister Mamata Banerjee wanted to give Bangladesh 25% share only, so the summit failed. On September 8, Foreign Affairs Secretary of Bangladesh Mijarul Quayes said at a press conference. "Teesta agreement is finalised; we are not to give any more concession." Does the Bangladesh stand on Teesta waters still remain?

We got some contradictory standpoints from the Bangladesh government in the media. The then PM's advisor Mashur Rahman said: "In fact we do not know how much water is flowing through the Teesta River. We are to measure it for 17 years, then after that the agreement shall be signed" (The



Location of the Gazaldoba Barrage & Link Canal

Daily Star September 3, 2011). In that case, a deal in 2011 to measure the Teesta flow for 17 years was nothing but eyewash, not to benefit the people of Bangladesh anyway. In fact, the water of Teesta River flowing down from Sikkim is being obstructed by the Gazaldoba Barrage and being diverted by a link canal to the Mahananda-Mechi-Fulhar Rivers. This transfer of water from Brahmaputra basin to Ganga basin is unacceptable, and it violates the International Convention on Non-navigational uses of Watercourses of 1997 in force since August 17, 2014. Water of a river can be used on equitable basis where the minimum historical flow has to be maintained for the life of the river, and no harm can be caused to the other state.

The Watercourse Convention Article 7.1 states: "Watercourse States shall, in utilising an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States." Article 7.2 says: "Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of Articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation." In Article 25 of the statement, the Indian side reiterated its earlier commitment that it would not take any

unilateral decision on the Himalayan component of the proposed River Interlinking project which may adversely affect Bangladesh. This commitment should be reflected in the interim agreement to be signed on Teesta waters.

The Feni River has about 2,000 sq km (200,000 hectares) catchment area beyond Amlighat, of which 800 sq km is in India (Tripura) and 1,200 sq km is in Bangladesh. The Muhuri has about 800 sq km catchment area in India (Tripura) before it enters into Bangladesh, near Belonia. The Selonia River has origin in India having catchment of about 250 sq km in Tripura. India being militarily strong and having strong border surveillance, withdraws water from the Feni River by pumps for irrigation and water supply. Bangladesh, on the other hand, though a co-riparian nation, is being prevented by the Indian Border Security Forces from doing so. The Feni River has a large irrigation project in Feni and Chittagong districts with command area of 40,080 hectares. This project is being affected by the withdrawals in India. The Feni River has a historical annual and lean period flow. All withdrawals from this basin harm the ecology and economy.

The Feni River was discussed in the 37th India Bangladesh Joint Rivers Commission meeting held in New Delhi during March 17-20, 2010. Bangladesh agreed to allow 1.82 cumec (60 cusec) of water withdrawal by India for drinking purposes. This matter was to be discussed again in the 38th JRC meeting in Dhaka on September 5, 2011, for signing an agreement. The meeting was not held. The recent move to share the Feni River water was based on its lowest flow of 120 cusec on 50-50 basis. Bangladesh, though having larger geographical area, is offered 50-50 sharing of the Feni waters, which is not acceptable.

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QUOTABLE Quote

The true delight is in the finding out rather than in the knowing.

Isaac Asimov

CROSSWORD by Thomas Joseph

ACROSS

1 Small valley

5 Foe of Rocky

10 Writer Ganetti

12 Game setting

13 Spree

14 Fuses

15 Salt Lake City Player

16 Scale of degrees

18 Brainiac

20 Superb serve

21 Vicinity

23 Homer's neighbor

24 Heredity unit

26 Nursery group

28 Kilmer of "The Doors"

29 Tedious

31 Words with pickle, stew or jam

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DOWN

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19 McKellen of "X-Men"

22 World books

24 Chocolate dessert filling

25 Waistband stuff

27 Unoriginal

28 Parish heads

30 Braz. neighbor

33 Hopping mad

34 Complete

35 Run-down

37 Dispatched

38 Mid-month time

42 Tyler of "The Lord of the Rings"

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Yesterday's answer

MARTHA CHEW

AMORAL HERO

TYBALT EARN

CLOSED

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ADO COVERED

BOA AWE ICE

ORDERED PAT

RETRO ASPS

RAMPU

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CRYPTOQUOTE 8-22

AYDN XFAQC LCROJD XQUC QO QSAYDN

ROERORNC KQMQRNH EYV NQTRQJ

NXROJD EYVJVQNCI.

- QSIYFD XFBSCH

Yesterday's Cryptoquote: LEARN AS MUCH AS YOU CAN WHILE YOU ARE YOUNG, SINCE LIFE BECOMES TOO BUSY LATER.

- DANA STEWART SCOTT

BEETLE BAILEY by Mort Walker

BOY! ARE YOU A WIGGLE-WORT!

GREG! MORT WALKER

I WAS TRYING TO INJECT YOUR ARM!

HENRY by Don Trachte

RESTAURANT

RESTAURANT

RESTAURANT