...because Food is about agriculture, about ecology, about (wo)man’s relationship with nature ... about nation-building, cultural struggles, friends and enemies and at times, even about sex...

Hot off the Press!

Food & Nutrition Security

WOTR’s Position Paper
Connecting the Dots
Evolving Practical Strategies for Adaptation to Climate Change
Food is about agriculture, about ecology, about (wo)man's relationship with nature ... about nation-building, cultural struggles, friends and enemies ... and at times, even about sex said the food expert Mark Kurlansky. And he couldn't have been more right. In our own experiences, upon deep reflection, we see that food for mind, food for the body, and the food for spirit drive the human struggle for meaningful existence.

As we step into 2013, having survived the 2012-hoo-ha about a world coming to an end (chuckle), we celebrate Makar Sankranti, celebrated every year on the 14th of January. It marks the beginning of the harvesting season. Celebrated as a season of plenty, a season connected intrinsically with Food, this festival has various names all over the country. Pongal in Tamil Nadu, Bhogali Bihu in Assam, Maghi in Haryana, Shishur Sankranti in the Kashmir Valley and Pithey in Bengal. (Aside: Archeological surveys also reveal that the Mayans also celebrated a similar kind of festival – which would make it a 6000-year-old style of celebration!).

Our newsletter celebrates this moment along with the food-growers (and the food-consumers) all over the world by focussing upon this very basic need – FOOD – as we step into the 20th year of our existence as an organisation. We bring you a basket of goodies – our very own Position Paper on Food & Nutrition Security, socio-cultural reflections on food, how food can become a vehicle of empowerment... and not to miss – a local recipe!

A Happy New Year to you... may this year be a body, mind, and spirit fulfilling one for one and all.

- Editor

HAPPY BIRTHDAY WOTR!

WOTR completed 19 years since its inception in December 1993. As it stepped into its 20th year of service to marginalized and vulnerable communities, we@WOTR reiterate our commitment to our vision of equity, rejuvenating ecosystems, and working towards bringing Positive Change.
**EDITORIAL**

Food is about agriculture, about ecology, about (wo)man’s relationship with nature ... about nation-building, cultural struggles, friends and enemies ... and at times, even about sex said the food expert Mark Kurlansky. And he couldn’t have been more right. In our own experiences, upon deep reflection, we see that food for mind, food for the body, and the food for spirit drive the human struggle for meaningful existence.

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- Editor

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**LOCAL WEATHER SPECIFIC AGRO-ADVISORIES BY SMS**

*WOTR started its 20th year with a bang by disseminating Local Weather specific Agro-advisories by SMS to the farmers under its Climate Change Adaptation project. This pilot is being conducted with 100 farmers of Sangamner and Akole Taluka, Ahmednagar District, Maharashtra.*

*WOTR’s first Local weather specific agro-advisory was sent out at 5.14 pm on December 20, 2012 for the tomato growers of Warudhi Pathar and Sarole Pathar, Sangamner Taluka, for control of red mites. The SMS advised the farmers of spraying Neem seed kernel extract (NSKE) to control the pesky mites which are the bane of every tomato farmer. WOTR also disseminated agro-advisories through SMS for other crops with the advice for controlling onion blight, Wheat crop - advice for correct application of irrigation and pest control with NSKE and Sorghum crop - advice for appropriate irrigation.*

*We will soon be bringing you more news... as to how the farmers feel about this service and how they apply it... so stay tuned.*
Other would be reaffirmed by my rejecon of their cuisine and they would always ask me anxiously if I liked the food. At those mes, I would hasten to assure them, food stuffed in my mouth, that I genuinely enjoyed their food. A lot of mes, I was able to forge a connect with the women solely because I was able to point out that where I came from (Kerala) we too consumed the same vegetable or how a certain dish was very similar to a dish in Kerala. And they would smile and look happier that I was comfortable with their food. They were also curious about how a community so far away could create a dish that bore any resemblance to any dish they cooked. This helped in starng some sort of dialogue and interacon with the women and helped me to get a peek into their life and culture, if only for a brief moment. Food opened the door to a culture that Saussure had predicted I would probably be unable to access through language alone.

FOOD TALK
- Shweta Radhakrishnan

“Food functions metaphorically as a bridge across the borders of cultural communities.”
-Van den Berghe

As we rumbled into Khandgedara, I suddenly thought of the Swiss structuralist, Ferdinand de Saussure. No, he was not like your kindly neighbourhood uncle and no, the kaka (old uncle) on the cycle did not remind me of him. But as I was about to enter a village whose language was alien to me, Saussure came to mind. He has wrien reams about how language and our experience of the world are interconnected. He postulates that language not only equips us to describe what we see around us, it actively constructs the world around us. Without a word for a particular thing or emotion, we probably wouldn't know it fully or be able to share it. His theory posits that “Psychologically our thought - apart from its expression in words - is only a shapeless and indistinct mass.” The lack of a word in a certain language signifies that the community that speaks the language has not experienced it enough to construct a word or define it linguiscally. Consequently, it is difficult for an outsider to grasp an idea that is put forth in a language he doesn’t understand and one that cannot be translated into his own.

I remembered Saussure's ominous words as our jeep screeched to a halt in the dusty, little village. The minute we stepped off the jeep, we were greeted by Marathi words and phrases and immediately I felt I like I had ended up next to the Tower of Babel. To be surrounded by a language that you cannot fully comprehend or really participate in is quite an unsettling feeling. Not only are you handicapped when it comes to communicating with people, you also feel helpless at being unable to understand the finer nuances of their culture which are so aptly expressed in their language. As we trudged along to keep our bags in a house, I smiled weakly at anybody who spoke to me in Marathi and said apologetically, “Mala Marathi maith nai.” (I don’t know Marathi.)

Later in the day, during dinner, the lady sitting next to me enquired whether I liked the food by pointing at the food and supplemenng her words with gestures. Suddenly I felt I shared some common ground with her. Through a series of gestures and some translations by my friends, I enthusiastically told her I really liked the food and that it was truly wonderful. Having communicated that, I felt a lot less lost than before.

Food for me became an important point of interacon with the men and women in the village. Over the course of this trip, I began to follow the language better when people spoke slowly or used words that were similar to Hindi words. But I was never able to connect with people better than I was able to over a meal. Meals were a highlight of the trip, simply because here was a tangible product of an idea they were trying to put forth in their language. Food is a material manifestaon of a community's culture. Unlike language where you have to know the system of signs and meanings to understand the cultural system it sets up, food sets up a more immediate engagement with a community's culture. Which is why in many ways, food helped me overcome the language barrier in the villages and which also explains why the only words I know in Marathi all pertain to food. In every village that we went to, I think I felt completely at ease with the women during a meal. They also probably felt more comfortable asking me about food. “More bhaji?” “Is the dish too spicy for you?” “Do you like the Bhakri here?” Since they knew I wasn’t a Maharashtrian, they knew that their typically Maharashtrian dishes would be a novelty for me. But there was also the fear that my position as an
'Other' would be reaffirmed by my rejection of their cuisine and they would always ask me anxiously if I liked the food. At those times, I would hasten to assure them, food stuffed in my mouth, that I genuinely enjoyed their food. A lot of times, I was able to forge a connect with the women solely because I was able to point out that where I came from (Kerala) we too consumed the same vegetable or how a certain dish was very similar to a dish in Kerala. And they would smile and look happier that I was comfortable with their food. They were also curious about how a community so far away could create a dish that bore any resemblance to any dish they cooked. This helped in starting some sort of dialogue and interaction with the women and helped me to get a peek into their life and culture, if only for a brief moment. Food opened the door to a culture that Saussure had predicted I would probably be unable to access through language alone.
A LIFESTYLE OF FOOD AND A FOODSTYLE FOR LIFE
- Radhika Murthy (with inputs from Shweta Radhakrishnan)

“Food can tell us about anything and everything. It’s simultaneously molecular, bodily, social, economic, cultural, global, political, environmental, physical and human geography.”
- Probyn, 1999; Crewe, 2001; Stassart and Whatmore, 2003

How different communities use their available resources to produce indigenous cuisines is really a study in adaptation and evolution of human culture. So much of food is culture. Our culture dictates our ingredients, our preferences, the way we consume food and also constructs binaries of what is acceptable and unacceptable within a cuisine.

But people live to eat, eat to live and do everything in between too. Food in its various forms is a continuum between survival and affluence. Our lifestyles dictate our food – amount, content and quality – and often food is an indicator of life- climate, resources and culture in a particular area.

The economics of food has a lot to do with the development of any cuisine. The ability to purchase certain ingredients is of course an essential component of what gets included or excluded from a cuisine.

In Shiswad, a tribal village in the Akole Taluka (a block within Ahmednagar district), black tea heavily flavoured with lemongrass is often served, because milk is a luxury here. But whether with or without milk, tea in rural areas is usually saccharine sweet. This can be because many people here are engaged in hard, physical labour and need a high sugar intake. Methi (fenugreek) is made as a gravy dish (Methichi paatal bhaaji) rather than a dry dish here, because methi tends to shrink when fried, thereby greatly reducing the quantity that can be served. However, when cooked in gravy, the volume is greater and the dish can be served to more people.

It is noticed that people in poorer societies also tend to eat more spicy food. Eating spicy food tends to satisfy one sooner and eat less. The other side to this is that many dhabas (highway restaurants) in India serve almost unbearably spicy food. This is because most of their clientele are truck drivers and labourers, who consume a lot of gutkha and tobacco in various forms. Excessive consumption of gutkha / tobacco dulls taste buds to such an extent that moderately spiced food seems tasteless and bland.

In rural India, changing cropping patterns in agriculture have turned demand and consumption of certain foodstuffs topsy-turvy. Millets, called poor man’s grain, required fewer resources to grow compared to rice and wheat, used to be a staple in Maharashtra. Millets are richer in fibre (needed for hard labour) and grow more easily than wheat in this region. Bhakri, a flatbread made with coarser millets like jowar (sorghum), ragi (finger millet) and bajra (pearl millet) used to be eaten by all. Wheat chapatis belonged to the rich and urban classes.

But the green revolution and higher demand for wheat in cities has made cultivating wheat for urban markets more economically viable. Farmers get cash, albeit falling into the unsustainable cycle of hybrid seeds, chemical fertilisers, pesticides and reducing soil health. So, wheat chapatis are now a norm in Maharashtra’s village too and millets, the erstwhile poor man’s grain is now costlier than wheat! Market driven trends in farming do bring in cash-affluence in places. But it

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also brings in trends like cash crop cultivation and mono cropping which ultimately makes food consumption more market-dependent and less diverse. The effects on food and nutrition security are perceptible.

Quite often, the inclusion of outside food products in one's daily meal is a distinct sign of affluence. The material display of one's ability to go beyond what is immediately available and procure what one wants from somewhere else is apparent when there shops in villages selling foodstuffs produced outside. In the relatively prosperous Akole villages of Khadki Budruk and Malegaon Pathar, store-bought pickles, poppadom and a generous sprinkling of coconut on the pohe (breakfast made out of flattened rice, onions and peanuts) are all tell-tale signs of affluence. These are indulgences affordable only when one has a certain economic and social standing. In comparison, Shiswad has a ration store, while Khandgedara has a small makeshift store mainly selling soap and chocolates. Khadki and Malegaon, on the other hand, have bigger shops which stock varied food items and city 'brands'.

The greater the exposure to outside products, the greater the desire to imitate them. In many villages there is a more localized version of Rasna (a popular Indian instant drink mix), morphed into Ras Hai Na and Ras Pi Na. This powder, manufactured in Madhya Pradesh, is now available in most villages here. It is served on special occasions to indicate the affluence of the family to guests.

A small digression into the way people eat brings in another angle to food culture. A comparison of dining spaces and the economic condition of villages in Akole gives the impression that segregated and more individualized dining spaces are the result of greater material affluence and 'development'. Traditionally, people eat in the kitchen as a family and in the living room or even outside in the yard if the house is too small for guests. Musing on a more global level, fast food like burgers or sandwiches, is an all-in-one, single-person meal. It is designed in such a way that it is not always easy to divide and share with others. Traditional food – rice, chapatis, vegetables, on the other hand, is served in helpings and can be easily shared, if someone happens to walk in during meal time.

Food can thus effectively reflect social changes brought about by material affluence and market incursions. But does access to markets mean everyone eating the same food? Is that food the right, nutritious food? It is interesting that the trend among the urban elite of shifting to 'organic, raw, healthy' foods and the rural trend towards packaged, processed, 'urban' foods are both linked to lifestyle and markets. The key is to strike the right balance between current food 'fashions' and essential nutrition.
In the classical feminist picture, the woman needed to step out of home, specifically out of the kitchen and take up a job, so that she could also be economically independent like men. The kitchen entombed women in shackles of housework. So a certain class of women feel that liberation for them means freedom from the kitchen and all that it signifies - freedom from being solely (often thanklessly) responsible for the food department in the house. This thinking is the logical outcome of centuries of patriarchy in which all work related to house and hearth is secondary and therefore the woman’s prerogative as the weaker sex.

Patriarchy confined women in the kitchen, but fittingly, it is in the kitchen that thousands of rural women are cooking up their independence and freedom. The kitchen is now the new powerhouse for women and food is their power.

Today, in the rural Indian context, at a superficial level, almost nothing’s changed. Men work, or don’t work, depending on the level of their addictions. The woman cooks and cleans, fetches water and firewood and provides what the family needs, often even financially, but only doing jobs women are ‘allowed’ to do. She doesn’t participate in important decision making, especially not in politics. There is no such thing as equality between the sexes; typical gender roles are unquestioned. Women carrying headloads, blowing into a stove in a smoky kitchen, little girls washing dishes or looking after their baby siblings... are ever-present images. But sift through this surface and at least in some cases, a small but sure change can be glimpsed.

And this change is happening in the kitchen.

The Self Help Group (SHG) movement has spread far and wide in India today. Women come together in a group of 10-20 and save money every month, lend money to each other, form bank linkages and set up income generating enterprises. It has been a very effective means for women’s empowerment – financially and in terms of social standing and decision making for women all over India. Rural India now abounds in success stories of how SHGs have revolutionised women’s lives.

And not surprisingly, many successful businesses started by SHG women are food-based. “The SHG Kitchen” is a source of steady and much needed additional income for many families. The ‘Papad-lonchi’ businesses, as they are often called in Maharashtra, actually cover quite a range of foods - poppadum, pickles, spices and masalas, semi-processed and processed food products - fruit juices, concentrates, chutneys, powders and pulps, depending on the level of access to technology, some medicinal, herbal products, and not to forget - catering orders. It is quite common nowadays for...
SHGs to cook for major events in the village, the mid-day meals in schools are contracted to them and the success of Ecotourism in many areas is due to lip-smacking local delicacies served by SHG women. Even at Shiswad’s Biodiversity Festival organised by WOTR last year, the food stalls were filled to the brim, spelling instant economic success for the food stalls ‘manned’ by SHG women. Some groups have become veritable entrepreneurs with shops and outlets in cities and even exporting their products. WOTR-Sampada has facilitated an outlet called Ami Leki Ahilyechya (We, the daughters of Ahilya) in Sangamner, which packages variety of food-based products made by SHG women from our project areas. This year, their home-made Diwali snacks are in demand in Pune homes, hard-pressed for time to prepare them themselves. Ami Leki... even plays her part in conserving local seed varieties by packaging organic, locally-produced grain varieties for the increasingly health- and environment-conscious urban market.

Be it because of centuries of conditioning or a natural instinct, women are endowed with culinary skills that they have always put to excellent use to secure the well-being of their families; now even the economic well-being. The buck doesn’t stop here. Being economically independent and bringing home the dough naturally reflects on the status of the woman of the house. She now gets to take decisions. And what are the choices that women make as soon as they get a chance at a better life? First, better nutrition and a better future for her children- a better house, education, health. Then, a steady income source for the husband- there are a number of stories of women buying rickshaws, cars, trucks etc. or setting up businesses for their husbands. Finally, emboldened by SHGs and their apex bodies- the SMS (Sanyukta Mahila Samiti), women have now stepped into the political sphere. Many women have assumed positions of power in a hitherto indisputably male scenario. The ripple effect of this change is often a change in the priorities of the village and a more integrated vision of its future.

If the drift of this whole article is turning women into super-successful heroines, then let me bring the tone back to reality. The above described trends are only the extreme positive side. (But isn’t it great that there is one?)

With or without the backing of an SHG, the lives of women by and large continue to be one of hard drudgery and discrimination, of denied and lost opportunities.

Because in India, the ironies never cease, the food-provider is often the most deprived, when it comes to nutrition. The woman (and often, the girl-child) is last to eat in the family, is often anaemic and strains her personal health time and again to provide for her family. Working in the traditional, rural kitchen is a respiratory hazard, times of child birth and post-pregnancy wrought with risk and neglect of basic health and hygiene. Access to health facilities and even a toilet for personal privacy is a rarity, which is abominable in the absolute sense, for human dignity. Today, there is a growing awareness about food and health issues among women themselves due to education, widespread media and concentrated efforts by governmental and non-governmental agencies. But much more needs to be done so that food empowers women and doesn’t drain away their strength, both literally and metaphorically.
Despite the negative effects of the processes explained above, urbanisation and industrialisation are growing at breakneck speed. These processes are enormously boosted by globalisation-induced structural reforms in India. However, macro interventions have limited impact in achieving FNS at the micro (household) level.

Looking at India’s Health Score Card and the nutritional status like has changed in decades:

In futuristic societies, there might be pills endowed with adequate nutrition needed for human beings to function healthily. There would be no need to go through the hassle of cultivating the right food, being able to afford to buy it from the market and then eating the perfect balanced diet that would keep us healthy. But till that happens, nutrition through actual food is inextricably linked with our happy and healthy survival.

But unfortunately, Food and Nutrition Security (FNS) in India is in quite a quandary. In our country, the food-grower is seldom the consumer. Farmers grow food not to feed themselves and their families, but to feed an insatiable, ever-changing market, controlled by forces of globalisation that they are often clueless about.

Touted as the solution to all our food security problems, the Green Revolution is now revealing its dark side. Over dependence on hybrid seeds, chemical fertilisers, increased pest incidences and thereby increased dependence on chemical pesticides, has resulted in degraded soil health. A culture of excessive irrigation and veering toward a monoculture of water guzzling cash crops for short term gains is rampant in villages, resulting in misdirected aspirations of the small farmer. Water logging and salinization of soils is not uncommon, necessitating even more dependence on external inputs, further aggravating the problem.

To add to this, an unpredictable climate makes people living in climate-dependent, resource-fragile areas such as arid and semi-arid regions (dry-lands), in low-lying plains, coasts, deltas, and islands, doubly vulnerable.

Climate change is a key, yet little understood player, over which we have no control. It affects the fundamentals of the food production system as it delivers a triple direct impact on water availability, health of the ecosystems, and agriculture and livestock production. All four food production systems, i.e. forest-based, water-based (rivers and lakes), agriculture-based (mainly subsistence farming), and allied (livestock and animal husbandry) food systems are experiencing degradation and face severe challenges of sustainability at the local level, which call for region-specific, adaptive responses and coping strategies. Simultaneously, given the criticality and complexity of food and nutritional security in the context of climate change, it demands a holistic approach.

Addressing food and nutritional security is a complex issue given its reliance on many factors and the interconnections and interdependencies between them.

Food security is a function of different factors for different communities in India. For the urban rich it is a function of availability through the market, but the urban poor require support from the public (non-open market) distribution system. Similarly for a majority of the rural rich it is a function of self-sourcing through farm-production, common/community owned resources such as forests and water ecosystems, and through the open-market; whereas the poor and marginalised additionally depend heavily on the public distribution system (PDS).
Despite the often negative effects of the processes explained above, urbanisation and industrialisation are growing at breakneck speed. These processes are enormously boosted by globalisation-induced structural reforms in India. However, macro interventions have limited impact in achieving FNS at the micro (household) level.

Looking at India’s Health Score Card and the nutritional status little has changed in decades:

**India’s Nutritional Status Report Card 2011:**

67th out of 84 countries  
The global hunger index 2009 (IFPRI, 2009)  
(much below poorer Asian countries such as Pakistan and Nepal)

Undernourished: 17 % in 1995–97 to 21 % in 2005–07 (Souza, D and Chemielewska, D, 2011)  
Underweight children- 43% (HUNGaMa Survey, 2011)  
(twice the average prevailing in sub-Saharan Africa)

WOTR’s pre-project assessment (Nov 2009)  
Child Growth-monitoring: Weight-for-age nutritional status of Age group- 0-5 years in 22 villages of Ahmednagar and Aurangabad districts in Maharashtra:  
37 % girls and 51 % boys normal  
33 % girls and 30 % boys in 2nd degree malnutrition  
30 % girls and 19 %t boys in 3rd degree malnutrition

Anaemia in breastfeeding women: 63 %  
Anaemia in pregnant women: 59 %  
Anaemia in other women: 53 %  
(National Family Health Survey [NFHS], 2006)
The status quo since the green revolution calls for a fresh look at the way FNS is being addressed. FNS is dependent on three important variables: (a) food production; (b) the population, their food habits and the accessibility to food; and (c) government policies.

### a. Food Production

<table>
<thead>
<tr>
<th>Current Practices</th>
<th>Impact</th>
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<tbody>
<tr>
<td>Shift in land use by reduction in forest area as well as concretisation of productive lands</td>
<td>Flow of ecosystems services affected</td>
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<tr>
<td>Water needs are met by excessive withdrawals from ground water aquifers and over-irrigation</td>
<td>Drastic fall in water table and land salinisation and water logging</td>
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<tr>
<td>Intensive use of chemicals</td>
<td>Land degradation, unhealthy agricultural practices, increased dependance on market</td>
</tr>
<tr>
<td>Traditional mixed farming system has been replaced by intensive agriculture with livestock having a limited or an exclusively intensive role</td>
<td>Restricted nutrient content in the household food basket, increased dependance on earning cash and market</td>
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This entire system based on short term gains, and no regard for ecological sustainability, gives little thought to food production for the coming generations.

### b. The population, their food habits and the accessibility to food

<table>
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<tr>
<th>Current Practices</th>
<th>Impact</th>
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<tr>
<td>Rising incomes, urban tastes and globalisation tend strongly in favour of processed foods</td>
<td>Intensive mono-cultivation of crops</td>
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<tr>
<td>Market forces generally devalue traditional crops</td>
<td>Massive loss of agricultural and livestock biodiversity as well as of traditional knowledge</td>
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<tr>
<td>Local agriculture and ecology are disrupted and 'alien' (understood as non-local) species are introduced and valued</td>
<td>The quantity and quality of food locally consumed in keeping with the various seasons, is adversely affected, declining nutrition intake of the people.</td>
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<tr>
<td>Rising prices, inflation and inefficiencies in the PDS system</td>
<td>Increases vulnerability of an already impoverished population</td>
</tr>
<tr>
<td>Increase in entitlements through public FNS schemes</td>
<td>Creation of a dependency syndrome placing obligation only on the government to address FNS</td>
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c. Government Policies:

This is the most important driver which directly influences the key areas of FNS. With rising incomes and aspirations, a growing population, and with declining productivity in traditionally high yielding agricultural areas, the government is looking to replicate the green revolution in new areas.

Policies that have resulted in declining productivity and environmental damage in the green revolution areas are being replicated in the ecologically sensitive, biologically rich and climate-sensitive areas of central and eastern India which are traditionally rain-dependent areas and therefore highly vulnerable to climate variability. This is dangerous on many fronts. It appears lessons have not been learnt adequately.

There are nevertheless signs of hope:
- Increasing public awareness of the hazards of intensive commercial scale agriculture
- A growing market for organic products
- Increasing interest among scientific circles as also a small opening in the policy space for sustainable agriculture

Conditions need to be created at the grassroots as well as policy level that can catalyse promising developments such as sustainable agriculture into a large scale movement across the country.
The 18th session of the Conference of the Parties (COP18) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 8th session of the Meeting of the Parties to the Kyoto Protocol (CMP8) was held in Doha, Qatar, from November 26 to December 7, 2012.

Making Policy Work for the Grassroots: Empowering Local Self Governments for Climate Change Adaptation in Drylands – WOTR’s Event at Doha

One of the highlights of WOTR’s participation at the COP was an event that it hosted on the 5th of December at the Doha Exhibition Center and was attended by a number of international development organizations, research institutes as well as NGOs. There were presentations from UNDP (United Nations Development Programme), GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) and WOTR (Watershed Organisation Trust). While representatives from WRI (World Resources Institute) and SIWI (Stockholm International Water Institute) contributed by serving as panelists. Other organizations that took part in the event were the GAA (German Agro Action), GDI (German Development Institute), INECC (Indian Network on Ethics and Climate Change) and CICERO (Center for International Climate and Environmental Research – Oslo).

Read the recommendations to the Adaptation Committee @ www.wotr.org/2012/cop18-doha

<table>
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<tr>
<th>Position</th>
<th>Expected impact</th>
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<tr>
<td>Increasing efficiencies</td>
<td>Reduction in losses across the value chain, from farm to plate</td>
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<tr>
<td>Environment friendly food production</td>
<td>Cultivation as close to the centres of consumption as possible – reduce food miles and resultant carbon footprint</td>
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<td>Food sovereignty</td>
<td>Local products meet the local needs throughout the year as far as possible</td>
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<tr>
<td>Decentralisation of Distribution and Storage systems</td>
<td>• Storage at the district level would value local grains, respond to needs within a short span of time and reduce carbon footprint</td>
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<td></td>
<td>• A decentralised system would be more effective and manageable in context of PDS as also the ICDS and school programs</td>
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<td></td>
<td>• Local taste demands would be met and local markets would be promoted</td>
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<td>Storage at the household level (Storage given preference to purchasing costlier food products)</td>
<td>• Going back to traditional practices for conserving grain and food products</td>
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<td></td>
<td>• Household grain bins and community warehouses given importance</td>
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<td></td>
<td>• Distress sales would be prevented or at least reduced</td>
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<td>Enhancing Social Capital</td>
<td>• Need for reverting to socio-cultural traditions of sharing and support in rural communities as a means of disaster preparedness that would absorb the shocks and stresses in FNS</td>
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<td></td>
<td>• Banning external contractors and encouraging local SHGs and village communities to purchase and prepare food for the mid-day meal program – (supporting the Supreme court orders for ICDS)</td>
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<td>Encouraging self-dependence and dignity:</td>
<td>• A gradual weaning off the PDS, retaining it for times of stress</td>
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<td></td>
<td>• People taking over responsibility for their own food security and reducing dependency on government</td>
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WOTR’s Position on Food and Nutrition Security in India:

WOTR believes that locally produced, nutritious, and varied food items should be the mainstay of FNS. As an organisation working at both grassroots and policy levels, it works for the following:

It is time that India needs rose above her depressing statistics. Any other kind of development is meaningless without ensuring that every Indian has the Right to food and the Right food. The realisation that hunger is unacceptable in modern India and a growing demand for performance and accountability of public institutions, are driving forces that can lead to sustainable food production and its availability especially to the poor.
The 18th session of the Conference of the Parties (COP18) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 8th session of the Meeting of the Parties to the Kyoto Protocol (CMP8) was held in Doha, Qatar, from November 26 to December 7, 2012.

**Making Policy Work for the Grassroots: Empowering Local Self Governments for Climate Change Adaptation in Drylands - WOTR's Event at Doha**

One of the highlights of WOTR's participation at the COP was an event that it hosted on the 5th of December at the Doha Exhibition Center and was attended by a number of international development organizations, research institutes as well as NGOs. There were presentations from UNDP (United Nations Development Programme), GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) and WOTR (Watershed Organisation Trust). While representatives from WRI (World Resources Institute) and SIWI (Stockholm International Water Institute) contributed by serving as panelists. Other organizations that took part in the event were the GAA (German Agro Action), GDI (German Development Institute), INECC (Indian Network on Ethics and Climate Change) and CICERO (Center for International Climate and Environmental Research – Oslo).

Read the recommendations to the Adaptation Committee @
[www.wotr.org/2012/12/cop18-doha](http://www.wotr.org/2012/12/cop18-doha)

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**WOTRAININGS**

**Climate Adaptive Livelihoods: Generating Local Wealth**
http://www.wotr.org/2012/11/casdaat-training/
*Date: 29 – 31st, January, 2013*

**Ecosystem based Disaster Risk Reduction**
http://www.wotr.org/2012/11/edrr-training/
*Dates: 4-8 February, 2013*

**Participatory Watershed Development in a Changing Climate:**
Building Resilience and Reducing Vulnerability
http://www.wotr.org/2012/10/wsd-cc-international/
*Date: 18-28, February, 2013*
The Right food is not child's play
*Women and Child Nutrition monitoring and remedies*

We often conclude that a weak nutritional status is linked to a weak economic status. But that is not always true. Lack of awareness and an unhealthy lifestyle can cause problems even in relatively well-off communities. This is the case with Kauthe, a prosperous village in Ahmednagar district of Maharashtra. Kauthe is located on the riverbank, has good access to water and so its agriculture is the envy of surrounding villages in the rainshadow areas. But of the 280 villagers tested for Haemoglobin, some shocking facts were exposed. More than 80% of both adult women and men were anaemic.

If this is the story of a rich village, what of more vulnerable sections? WOTR's Health program has been designed to tackle health and nutrition issues of the most vulnerable sections in an integrated and long term sustainable manner.

WOTR's Child Growth Monitoring Program is a direct intervention to improve nutrition status of children below 5 years of age. In addition to actually monitoring child growth along various parameters, creating awareness regarding the importance of a balanced diet, training mothers to prepare foods that will provide essential nutrients required for the healthy growth of children and stressing the importance of having a kitchen garden so that this food can be made at a low cost from locally available produce and fresh vegetables, are the main components of the program.

Thus, the program not only keeps a record of the nutritional status of children, but also empowers the community from within to deal with their own nutrition and health issues themselves. The kitchen garden also ensures good health for the entire family and if managed well, can generate a small surplus as a welcome, additional income source.

WOTR has also published a book 'ChimanChaara' on local recipes of nutritious food preparations for children under 5 years. All the ingredients required can be procured locally, at very low cost.

The program is linked simultaneously to the village Anganwadi (Kindergarten) under the Integrated Child Development Scheme. The women of Self Help Groups work along with the Anganwadi teachers/workers to assess and monitor malnutrition and anaemia among children.

A colour-coded Growth chart of the children including weight, height, and overall growth indicators is prepared and put up on the Anganwadi walls so that the whole community can clearly see and become aware of the health status of their children. The linkage between Anganwadi personnel and women’s groups in the village creates a cooperative effort towards ensuring proper nutrition of the family. Mothers specifically, are trained to read and understand these growth charts and they now visit the health centres regularly.

The case of Samiksha Ghule from the village Savargaon Ghule brings to light a lot of interconnected issues. (box 1)
The Right food is not child’s play

Women and Child Nutrition monitoring and remedies

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Chandrakala Kokate from Bhojdari refused to come for a haemoglobin (HB) camp, because she claimed that she ate food twice a day and was as fit as a fiddle. After a lot of convincing by the Wasundhara Sevika, including offering to pay the nominal fee at the camp, she agreed to come and even pay for herself. When her haemoglobin was tested, it was alarmingly low. Chandrakala got quite scared when she realised the implications of such a low level of iron in her body. She thought she would have to be hospitalised and treatment would cost the earth. She only calmed down when the Wasundhara Sevika prescribed her simple, iron tablets, told her to supplement her diet with green, leafy vegetables and cook food in iron utensils. Over the next few months, Chandrakala followed the advice to the T. Her face lit up with joy and relief when her HB rose from 7% to 13% at the next HB camp.

Chandrakala has now enthusiastically started a kitchen garden behind her house and encourages all the women in her neighbourhood to get their health checked and participate in the program.

“After all, “I saved on a hefty hospital bill. This is the least I can do!” she grins.
Earlier, in Sattechiwadi, only 20% of the children had normal nutrition levels. 50% of children suffered from severe, 3rd degree malnutrition and 30% from 2nd degree. Today the percentage of children of normal nutrition levels has gone up to 38%. 3rd degree malnutrition has come down by a significant 18%.

But it does not suffice to only monitor Child Health. Women are also equally vulnerable.

The first to rise and the last to rest, the caretaker and provider for the family's needs, often the bread winner too – what would families do without women? But this pivot of the family is ironically the least cared for. The woman (and often the girl child) of the house is the last to eat, often leftovers after everyone else has eaten their fill, and the last to receive health care. In rural households especially, the physical strain and lack of nutrition take their toll on women's health. Malnutrition and anaemia among women is alarmingly high. Pregnancy and child birth are times of additional stress often ending in crises and tragedy. But the real tragedy is that most health issues can easily be averted, with a little bit of awareness about basic health and nutrition.

WOTR’s Health intervention in villages basically empowers the community from within, through basic knowledge about essential nutrition and locally available, low-cost solutions for tackling simple deficiencies and health issues.

The Wasundhara Sevika is a busy bee. Her tasks include conducting meetings on health and nutrition issues in the community from time to time, collaborating with mid-day meal scheme in the village Anganwadi and giving demos of nutritious food recipes from easily available ingredients in the village, making home visits to check on status of mothers and children and many other things. Since she also manages the women's Self Help Groups in the village, it is her task to generate awareness among women about their own as well as their family's health and nutrition.

Many women in the villages complain of tiredness, breathlessness even while doing simple household chores etc. WOTR conducts regular health camps and trainings for them, so that simple ailments can be resolved in minimum time, at minimum cost.

**Disappearing Delicacies**

Cash has now arrived in Akole. And no, we don’t mean that the people are rich. Just that they have moved to a cash economy. But what is it costing the community?

It has been a few years since this cluster of predominantly tribal hamlets, set in the Sahyadri ranges in Maharashtra, started selling its agricultural produce to markets in nearby towns of Rajur, Akole and sometimes Sangamner. This helped elevate their economic status but at the same time market forces started dictating cropping patterns. In the past, farmers used to cultivate only to ensure their own food security. However with market exposure, they started cultivating in order to sell. To increase yields, they opted for hybrid varieties of grains. To meet market demand, mono cropping replaced the old ways of diversified cropping. So basically, people gave up local foods and traditional ways and exposed themselves to market fluctuations.

Now the area has more cash than ever before but suffers from a poverty of nutrition. Due to the dominance of a few crops, this area is rapidly losing its agro-biodiversity.
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### Shrinking Platter

<table>
<thead>
<tr>
<th>Cereals</th>
<th>Pulses</th>
<th>Other Cereals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice (Hybrid varieties)</td>
<td>Wheat</td>
<td>Cash Crops (Maize, Sugarcane, Groundnuts, Tomato, Onion, Soybean, Potato)</td>
</tr>
<tr>
<td>Rice (Local varieties)</td>
<td>Proso Millet</td>
<td>Horse Gram</td>
</tr>
<tr>
<td>Finger Millet</td>
<td>Pearl Millet</td>
<td></td>
</tr>
</tbody>
</table>

### Calorie and Nutrient Content

- **Calories, Proteins, Carbohydrates, Calcium, Iron**
- **Calories, Proteins, Carbohydrates, Zinc, Magnesium, Iron, Vitamin B**
- **Calories, Proteins, Carbohydrates, Calcium, Iron, Fat**
- **Calories, Proteins, Carbohydrates, Zinc, Phosphorous, Iron, Fibre**

### Changing Cropping Patterns and Increasing Nutritional Vulnerability

Exposure to the outside world creates aspirations for an urban life style, based on incessant extraction and consumption of resources rather than need based utilization. The way of life in the cities is considered superior. Eating wheat bread (Chapati) is a status symbol rather than bread made from traditional grains like pearl millet (Bajra Bhakari) or finger millet (Nachani Bhakari). People who grew vegetables themselves, are now buying non-local vegetables from the market. Food and nutrition security is jeopardized. As the world shrinks, food miles grow and carbon footprints too.

Unsustainability is spreading like wild fire- from farms to forests. The forest that formed the nutritional back up of people in times of drought and crop failures, now only exists in the memories of old people in the village. Massive deforestation has led to diminishing traditional knowledge too. People no longer know anything about biodiversity of their own region. Many plant species are becoming rare and we have no idea how many may already be extinct. Moreover, people are now ashamed of their traditions. Gathering forest food as their ancestors
Did is considered below-dignity and a sign of backwardness. Deforestation leads to loss of habitat for many species of animals. So bush meat has all but disappeared from people’s plates. Owing to market demand, fish mining is still practiced here, often through highly dangerous and unsustainable means like dynamite blasting in rivers or streams killing off large populations of fish, very small fish along with large ones, at one go, resulting in rapid population decline.

Development initiatives like construction of dams and barrages are restricting upstream breeding migration of fish. Poof! Fish disappear and so does protein from people’s diets.

Iron, Calcium, Vitamins, Omega 3, Potassium, Copper, Amino Acids

Iron, Calcium, Vitamins, Fiber

Iron, Calcium, Proteins, Fats & Carbohydrates

Iron & Vitamins

Wild Fruits

Wild Flowers

Tubers

Bush Meat

Wild Seeds

Fish & Crabs

Reducing Resources

The Shrinking Platter

Undefeated by these dismal trends, the WOTR Biodiversity team has been working with the community in Akole, raising awareness about the need for conservation, especially as a buffer against the demon of climate change. Some interventions to increase agro- and forest biodiversity and thereby nutrition security of the community, are:
> Afforestation with native species,
> Invasive species (e.g.: Lantana) management and,
> Creating and maintaining People Biodiversity Registers

Documentation and rejuvenation of forests as food reserves in times of extreme crisis as well as everyday dietary supplements is absolutely essential to the community. Here is a list of some traditional recipes from Akole that are disappearing from the rural platter, leaving it bereft of good nutrition and distinctive flavour. In the hope that this nourishment will return one day – Bon Appetit!

### Some Traditional Recipes

<table>
<thead>
<tr>
<th>Name</th>
<th>Procedure</th>
<th>Prepared From</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mango Pickle</td>
<td>Pickle is prepared by mixing mango slices with salt, turmeric, mustard and a special spice mixture</td>
<td>Unripe Mango Fruits</td>
</tr>
<tr>
<td>Patavad</td>
<td>A layer of Horse Gram flour is applied on the leaf surface and it is cooked. The cooked leaf is cut into pieces and a <em>subji</em> is prepared</td>
<td>Alukanda Leaf</td>
</tr>
<tr>
<td>Kadhi</td>
<td>It is prepared by adding salt, turmeric, chili powder and some spices to the juice</td>
<td>Karavanda Fruit Juice</td>
</tr>
<tr>
<td>Karavanda Fruit Pickle</td>
<td>Pickle is prepared by adding salt and chili powder to crushed green fruits</td>
<td>Unripe Karavanda fruits</td>
</tr>
<tr>
<td>Dhokale</td>
<td>It is cooked along with <em>Pendha, Kadya, Dathara</em> Jaggery/ sugar is added</td>
<td>Pendha Tuber</td>
</tr>
<tr>
<td>Fried Fish</td>
<td>Fish is shallow fried in oil with chili powder and salt. Served with Finger Millet/ Panivaragu Bread</td>
<td></td>
</tr>
</tbody>
</table>
Delving into the treasure trove of traditional, forest-based recipes of Akole

What is a 'Food Special' without a recipe? So, we bring you a one from Shiswad village in Akole, Maharashtra. Not only is this recipe unique, it also has a story behind it.

In one of our Biodiversity trainings, the participants were sent out to collect information on various traditional cooking preparations. Then each group was assigned to prepare 2 dishes in to collect and document information about ingredients and preparation methods. The interconnections between traditional, local cooking preparations with CCA project were also discussed during the training.

A Tasting by 'expert chefs' (the homemakers of the community) and a Presentation of all the collected information – plant ingredients, nutritional importance of the dishes- was an enjoyable and informative program at the end of the day. A booklet containing more than 20 traditional recipes was also put together later.

During the presentation of a vegetable preparation of raw Umbar fruit, some very interesting facts were revealed. An old woman from the village recalled the famine of 1972, when she had first prepared this dish. A woman from a neighbouring village had told her that the Umbar fruit was edible and can be cooked like this into a vegetable! Our villages are a treasure trove of such priceless, moving stories, but today, the youth is pretty much unaware of them. So, this training program also served to make the youth aware of the rich heritage they must reacquaint themselves with.

So, here goes…. But first, more about the Umbar tree: **Umbar (Ficus glomerata)**

**Average lifespan of tree:** 100-120 years  
**Average height:** 20– 25 foot

This is a perennial tree. The leaves are a rich green, medium-sized, long and tapering towards the tip. The fruit are round, green when raw and reddish when they turn ripe. They are quite sweet to taste. The Umbar tree usually grows on the banks of streams in the forests or on bunds. It is widely found in the Akole region. The flower of this tree is rarely seen. It is a belief among people that luck will favour whoever sees the Umbar flower.
Uses of the Umbar tree:

1. The water in the roots is an effective cure for chicken-pox.
2. Goats like to eat its leaves.
3. The fruit can be eaten by people and animals.
4. The wood is used as fuel and to make doors for houses.
5. A branch is needed for the Mandap (canopy) made at weddings.
6. The Umbar tree has religious importance. In Shiswad, the Bharmal family worships the tree. Only the Pore family uses the branches of this tree as firewood.

Vegetable made from the tender fruit of the Umbar tree (*Ficus glomerata*)

**Information source and assistance: Jayavantabai Dagdu Pore**

**Edited by: Prashant Kalaskar, Somnath Gosavi**

**Ingredients:**
- 20 – 25 tender fruit of Umbar
- ½ Onion
- 4 cloves garlic
- A pinch of turmeric
- ½ spoon red chilli powder
- 2 spoons Groundnut koot (Ground Groundnut!)
- 1 spoon Oil
- 1 ½ litre water
- Salt to taste

**Cooked in:** Kadhai (Deep frying pan), a vessel with a lid

**Fuel:** 1.5 kg of wood (Mango/Behda wood)

**Time:** 25 min; **Serves:** 2

**Accompaniments:** Bhakri (bread) made from Bajra (pearl millet) or Nagli (finger millet), wheat Chapatis etc.

To be eaten fresh, not preserved

**Process:**
Light the stove and keep ½ a mug of water to heat on it. Wash the tender Umbar fruit clean and add them to the water to cook. Mash the cooked fruit properly.

Next keep the Kadhai on the stove. Pour 1 spoon of oil into the hot Kadhai. Add the garlic cloves first, then onion to the oil and fry till they turn red. Add the chilli powder, groundnut powder, mashed fruit and salt and stir properly together.

And the Umbar vegetable is ready!

**Caution:** The forest needs to be conserved so that this dish to not remain a memory on paper...