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Visions for this century(2)



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[Access June 2014 WPHNA response to ICN2 draft Rome Declaration here](#)

[Access July-August Fabio Gomes et al on ICN2 here](#)

[Access August 2014 ICN2 draft Framework For Action here](#)

[Access August 2014 WPHNA response to ICN2 draft here](#)

[Access September 2014 Fabio Gomes et al on ICN2 here](#)

[Access September 2014 CSO letter to ICN2 Open Ended Working Group here](#)

[Access October 2014 CSO open letter to ICN2 organisers here](#)

[Access October 2014 ICN2 Update report here](#)

[Access November 2014 Urban Jonsson, Claudio Schuftan on ICN2 here](#)

[Access the ICN2 official Rome Declaration here](#)

[Access the ICN2 official Framework for Action here](#)

[Access the Public Interest Civil Society Organisations Statement at ICN2 here](#)

[Access the Social Movements Statement at ICN2 here](#)

Editor's note

Last month, here, and next month, colleagues in the *WN* editorial family write about the state of world nutrition and public health now, and of their visions for the future. In doing so they add colour, personality and authority to the official and unofficial collective statements made from and to the UN International Conference on Nutrition, accessible above.

Brooke Aksnes writes:

In this our 'Visions' series, for three months – last month, here, and next month – we ask five members of the *WN* editorial family to address the same 10 questions and requests. Next month, the third and final in the series, we will collate all the responses and see what common themes emerge.

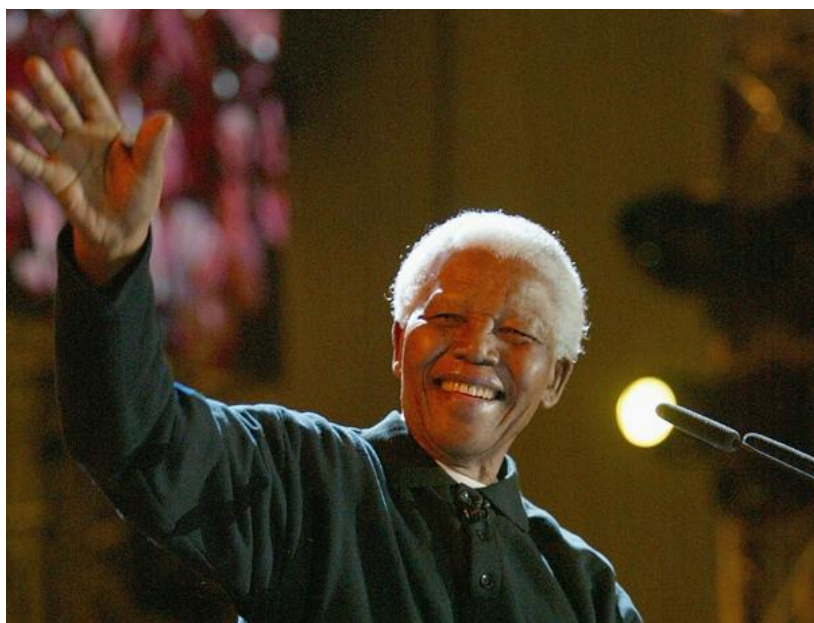
This month, our five family member contributors are as follows. Olivia Yambi from Tanzania is a former UNICEF regional advisor for Eastern and Southern Africa and head of the UNICEF office in Laos and Kenya. Anthony Fardet is a senior nutrition and food scientist at the French National Institute for Agricultural Research. Sara Garduño-Díaz, who is Mexican, is an assistant professor at the American University of the Middle East in Kuwait. Author of *Stuffed and Starved* and the *Value of Nothing*, the UK and now US citizen Raj Patel is a film-maker and a research professor at the Lyndon B Johnson School of Public Affairs, Austin, Texas. Mark Wahlqvist, Professor of Nutrition at Monash University, Australia and Zhejiang University, Hangzhou, China, is a former President of the International Union of Nutritional Sciences.

Their brief has been to think along the same lines as the committees and panels gathered together to agree official and unofficial outcome documents from last month's International Conference on Nutrition. The ten questions and enquiries we have asked them are listed below. These address population nutrition status, the prevention and control of relevant epidemics, and the general related health and well-being of the human, living and physical world, as seen now in 2014 and looking ahead.

- 1 What mainly determines population well-being, health, disease?
- 2 What mainly determines population good nutritional status?
- 3 How useful are the current nutrition sciences?
- 4 Are enough governments and official agencies making real progress?
- 5 Are current dietary guidelines and nutrition education programmes effective?
- 6 What types of civil society groups are most responsive to the biggest issues?
- 7 Name up to three inspiring leaders likely to be active in 2030, with reasons
- 8 Identify up to three of your greatest fears, with reasons
- 9 Identify up to three of your greatest hopes, with reasons
- 10 Make any other relevant remarks as you may wish.

Looking through last month's responses and those below, some common elements have already emerged. One is what is seen as the disproportionate power transnational corporations have over national governments. Another is the need for dietary guidelines that include the social, cultural, social, economic and environmental aspects of food and nutrition. A third is a call for return to diverse food systems that place humans within the whole world. A fourth is faith in the potential everybody has as a citizen, and the power of public interest organisations and social movements to protect what is good and change what is bad. We at *WN* offer these as a counterpoint to the collective statements made at the International Conference on Nutrition.

Olivia Yambi



We can be inspired by the example of Nelson Mandela, who said 'I am fundamentally an optimist. Part of being optimistic is keeping one's head pointed toward the sun, one's feet moving forward'

What mainly determines population well-being, health, and disease?

An environment that enables people who are poor to use their capacities to act in ways that enhance their access and use of those public services. An environment that promotes a state of wellness and that creates confidence and assurance for people to care for themselves. A system of governance that is accountable, not just as a provider of last resort, but as one that nurtures dignity. The well-being of a population is enhanced when mechanisms exist for people to engage in exchanges of views and knowledge that address and challenge the power systems and inequalities in society.

What mainly determines good population nutritional status?

Decades of studies and programme implementation in the field of nutrition has confirmed that population nutrition status is influenced by the triad of food, health and care. These are the underlying determinants of nutrition status. Optimal nutrition status results when children and populations at large have access to

affordable, diverse, nutrient-rich food; when appropriate maternal and child care practices are in place; and when there are adequate health services and a healthy environment including safe water and sanitation and good hygiene practices.

All these factors have to be in place simultaneously. All are necessary, but each alone is not sufficient to ensure good nutritional status. Food, health and care are themselves affected by social, economic, political and cultural factors. The conceptual framework of immediate, underlying causality of malnutrition has articulated this very well.

Yet more than two decades later, there is a tendency to over-emphasise the role of food alone. This distorts the reality of the multiple causal nature of nutrition problems in society, and thus also distorts action and investments for the realisation of the right to nutrition. This is especially so when new initiatives like Scaling Up Nutrition (SUN) limit themselves to nutrition-specific and nutrition-sensitive interventions that only address immediate and underlying causes, and thus avoid a political discourse on determinants of population nutritional status.

How useful are the current nutritional sciences?

They are useful mainly in understanding the physiological and biochemical context. This information and knowledge though, has to transcend the walls of academia and translate into policies and actions to deal with societal challenges. Theory and practice has to merge. Even so, Albert Einstein said ‘there is nothing more practical than a good theory’.

Are enough governments and official agencies making real progress?

Progress has been made as measured in terms of averages in decline of different forms of malnutrition. But this is not good enough. It masks the nutritional insecurity in communities and societies.

We need to move forward to enhance accountability for addressing realisation of the right to nutrition. In Africa, several countries including South Africa, Namibia, Timor Leste and Kenya have formulated or revised their constitutions with the Bill of Rights and articles on Rights and Fundamental Freedoms articulating—among other things—‘the highest attainable standard of health’. This way democratic institutions and citizens at large can challenge the lack of action towards progressive realisation of rights in their countries.

Others, like the Centre for Economic and Social Rights, through preparation of fact sheets that present information relating to disparities, inclusions and exclusions are helping in the process of visualisation related to human rights accountability.

Are current dietary guidelines and nutrition education programmes effective?

Guidelines are what they are. Often these are the preserve of programmers, decision makers or extension workers, and do not reach out to people who are poor. In very general terms, I find nutrition education very patronising. There is an overwhelming focus on telling people what to do, without adequate attention to understanding the limiting factors and capacities that would need to be in place and strengthened in order for the information to be translated into action.

What types of civil society groups are most responsive to the big issues?

These are from human rights-oriented grassroots civil society that are knowledgeable and accepted by the communities they serve. Also, they are civil society organisations that are themselves transparent and can shake the consciousness of leaders into action.

Name up to three inspiring leaders likely to be active to 2030, with reasons

This is a difficult call, in 15 years to come who might be around?

Identify up to three of your greatest fears, with reasons

One of my greatest fears relates to the dominance of top-down approaches and magic bullets – as if the world refuses to learn! Our language changes to accommodate the fads of the day. And thus technical solutions may be applied without concern for a reflective process, so that in the end there will be no sustained improvement.

Identify up to three of your greatest hopes, with reasons

There seems to be a serious understanding of the rapidly increasing inequalities in the world with their negative effects on people living in poverty, and on economies as a whole. There is a need for a whole different approach to development. People are staying connected and they will increasingly reject the dominance of profiteering conglomerates. There are context-specific examples of relevant actions resulting in reduction in levels of malnutrition. We can draw upon this to make sustainable progress.

Make any other remarks as you may wish

Stay positive and inspired. I quote Nelson Mandela on this:

I am fundamentally an optimist. Whether that comes from nature or nurture, I cannot say. Part of being optimistic is keeping one's head pointed toward the sun, one's feet moving forward. There were many dark moments when my faith in humanity was sorely tested, but I would not and could not give myself up to despair.

Anthony Fardet



Learning about food and nutrition should begin at school, with children taught and shown how food is produced, distributed, sold, and especially how it is prepared, cooked and enjoyed at home

What mainly determines population well-being, health, and disease?

This is a complex question. So much depends on cultural factors and the principal values of different populations worldwide. Well-being begins with satisfaction of primary needs. These include being able to eat one's fill, to have rewarding work, to have access to culture, and to build a harmonious family. Health includes possessing all one's physiological and psychological faculties that are working well. Disease is a state where we do not have our full capacities, or at least one that impedes or prevents us from doing what we are accustomed to do. A more nuanced analysis is also possible. For example, some disabled people say they are in a state of well-being, while some apparently healthy people say they do not feel well.

What mainly determines good population nutritional status?

In my opinion, the first condition for good nutritional status in a population is to have access, at affordable prices, to healthy diets within the neighbouring environment. Given this, nutrition education and public policies should be directed to encourage populations to choose the best possible diet.

How useful are the current nutritional sciences?

Up to now most nutritional sciences have not been very useful. If they were succeeding, the prevalence of diet-related chronic diseases would have decreased. Our situation, where obesity and diet-related diseases are increasing, implies failure.

My 17 years of experience in human nutrition research has led me to propose a number of hypotheses for this almost dramatic situation. First, 'neo-liberal' theory has been imposed on public research. This means decrease of public funding, perhaps especially in the nutritional sciences. Thus researchers have been driven to seek private funding. This means that they increasingly conduct studies that are in the interests of the agro-food industries, and not for the well-being of society.

Second, at least in Western societies, the extreme application of the reductionist paradigm to nutritional sciences has led to fractionating foods into isolated compounds and ingredients, and to associate one compound with one physiological effect. Consequently, the health potential of foods as a whole has been reduced to a few compounds. Food scientists and technologists have fractionated foods. This has led to the manufacture and marketing of refined energy-dense food products that are poorly satiating and depleted or devoid of protective phytochemicals.

Third, nutrition scientists and policy-makers have become more and more cut off from reality and its natural complexity. They continue to undertake research that is theoretical and not practical, and to make nutritional recommendations that are disconnected from real life. The reverse should be done. The way that people behave, including their actual dietary habits, and also what people value and believe, should be studied. This should lead to research that takes realities into account, and should enable a more holistic view of nutritional sciences involving more global approaches including physical activity, ways of life and cultural habits. Indeed, human nutrition is not pharmacology, and food compounds are not drugs; yet for decades, nutritional sciences have been carried out modelled on a pharmacological approach. This is probably because human nutrition has too long been considered as curative, not enough as preventive. This is certainly true in my country, France, where most funding goes to medical-type diagnosis and treatment, not really to prevention.

Are enough governments and official agencies making real progress?

It depends on which country. In France, the national Agency for Food, Environmental and Occupational Health and Safety is improving the national programme for nutrition and health. This includes discussions with dieticians to better understand expectations of the general public and thus to make nutritional recommendations clear and relevant. Nutritional education is being introduced in schools and colleges. The scientific community has also made proposals to government that food manufacturers label their products with colour-coded labels showing their relative nutritional value. However, commercial lobbies remain strong.

Are current dietary guidelines and nutrition education programmes effective?

No, not sufficiently. For example, in France recommendations are always based on food groups. But we know now that it is the nature and extent of food processing that render foods and products our friends or enemies, not botanical classification or nutrient content. Foods should be classified according to the processes that are used to make them. Science has now convincingly proved that the occurrence of diet-related chronic diseases is related to over-consumption of ultra-processed food products. As well as this, as suggested in the picture above, all children between 3 and 18 should be taught about nutrition and everything to do with acquiring, preparing and consuming food. After all, we all eat three times a day and it is an essential part of our life for both our health and our social activities. Nutrition should be a central feature in school curriculums.

What types of civil society groups are most responsive to the big issues?

I prefer not to identify specific groups or types of group. For me, the big issue is much more general. This is a fundamental inversion of values. As long as money is given a higher value than human life, profits will remain a kind of God. The global industrial food system, and specifically its increasing domination by processed food products, is the result of greed for money. Human well-being must now come before money. Then food systems will develop to address real human needs.

Name up to three inspiring leaders likely to be active to 2030, with reasons

The time when great leaders emerged is passed. Real leaders up to 2030 and beyond will be ordinary citizens who will take responsibility for their lives. In this century we are all leaders. I hope and believe we are entering a time where all people will awaken to their responsibilities and power.

Identify up to three of your greatest fears, with reasons

First, I fear the lack of education in some parts of the world and in some groups of people, which have led to extremist beliefs and actions; second, the increased presence of leaders who really are only interested in their own wealth or power and not in the well-being of society; and third, everywhere the omnipotence of money.

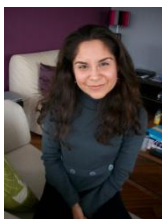
Identify up to three of your greatest hopes, with reasons

First, I hope for ever-better education for future generations; second, increasing awareness of our duty to protect the living and physical environment, and third, progression to constructive dialogue in all spheres and at all levels of society.

Make any other remarks as you may wish

No more in addition to what I have said above.

Sara Garduño-Díaz



Noel Solomons (at the front, kneeling) and some of the students he teaches and inspires at his CESSLAM centre in Guatemala City, here pictured at a break in an international conference

What mainly determines population well-being, health, and disease?

Culture, society and tradition. In other words, the environment in which people live will determine to a great extent their degree of well-being. Examples of this can be seen in countries like those of Scandinavia, where the population is encouraged to live a healthier lifestyle, there is a demand for quality foods and the physical environment is designed to encourage physical activity (bike lanes, hiking trails). Traditional social gatherings such as the *fika* and a society that has demanded a ban on genetically modified foods creates an increase in well-being.

Middle Eastern populations on the other hand have seen a decrease in their well-being due to negative changes in their environment. War, unstable societies, and 'development' that in reality is away from tradition towards more industrialised, 'Western' standards of living, which include processed food products, automatic everything, cars as the main means of transportation, are leading these countries in the wrong direction. Although economics and politics are strongly influential factors, I believe a society that demands change will have it.

What mainly determines good population nutritional status?

Economy, nutrition education and an appreciation of food. These are the main components of food and nutrition security and perhaps should be considered in backwards order. When individuals and populations appreciate food, they learn more about it and its effect on the body. Cultures that value good eating see food beyond its nutrient content; they appreciate what food represents and most definitely do not overindulge. When food is respected, it is preferred from ethical and local sources, handled with care and not over processed; it is consumed in a delicate manner. All of this, however, is only possible when people have access to food that is available in a socially acceptable way.

How useful are the current nutritional sciences?

They are useful – there is no problem with nutritional sciences in themselves. The issue, however, lies in the integration of clinical nutritional knowledge and food sciences to other disciplines and their application as a whole to specific situations. Tackling nutrition-related problems in different regions of the world with a single, one-sided solution is neither useful nor effective.

Are enough governments and official agencies making real progress?

No. Unfortunately, progress seems to get tied up in bureaucracy and political correctness. Official agencies are spending years in research and debate, and no real action is taking place.

Are current dietary guidelines and nutrition education programmes effective?

Dietary guidelines are not very effective, but nutrition education programmes are more so. The current guidelines in most countries are based on the latest available knowledge...from years ago! Food guides are not changing fast enough, and for the most part, adaptation to updated knowledge is not taking place. Most current dietary intake analyses and diet quality discussions focus on patterns, seeing entire food systems and not just simple nutrient sources. This is rarely reflected in official recommendations. With nutrition education though, more and more people are talking about food, questioning old paradigms and challenging 'givens'.

What types of civil society groups are most responsive to the big issues?

Grassroots social movements that tackle local problems. People around the world are no longer satisfied with the 'results' obtained by governments and official agencies; they are now taking matters into their own hands. In great part thanks to social media, awareness is now almost immediate, as is debate. In the Middle East, very strong and previously unquestionable issues are being tackled. Take for example Project 189, an initiative promoting the rights of domestic workers in the Middle

East. Workers' rights are a huge issue in this region, where I am now. Unfortunately, official agencies are not doing much to address this issue, making the work of informal social organisations like Project 189 of paramount importance.

Name up to three inspiring leaders likely to be active to 2030, with reasons

Thiago Hérick de Sá and Noel Solomons. Thiago is continually getting involved and trying to reshape food and nutrition panoramas at both national and international levels. It is refreshing to see someone who is working so hard who has years ahead in his career development. I am sure we will continue to see non-stop action from him. I have had the pleasure of listening to Noel at debates on early feeding practices, and his passion comes across in the form of authority and scholarship. He truly believes in what he does. Noel has years of experience working in various regions of the world. His work in South America has tangibly pushed forward the well-being of the people there. Well done, you two!

Identify up to three of your greatest fears, with reasons

Large corporations owning a patent for the genes of plants or animals is terrifying for me. These patents give too much power and control over food production to a handful of corporations. I can see disaster on the horizon if farmers become unable to continue their trade without having to pay for seeds each year. My second fear is the uniformity of food systems. I see the widespread adoption of a non-seasonal 'global diet' based on the same foods and products all over the world. Where are traditional foods going? Why are people swapping out their delicious varied dishes for the consistent consumption of the same few foods? Restaurants are taking over and encouraging this behaviour, while local eating practices are displaced. Thirdly, related to my second point, I fear the ultra-processing of foods into products. I don't want my food to be handled by machines and pre-packed full of non-recognisable ingredients. In short, I fear the loss of real food.

Identify up to three of your greatest hopes, with reasons

My hope is placed in grassroots awareness and action movements. I hope that this recent wave of enthusiasm for food and food quality does not linger but rather gains momentum. I hope that people continue to demand better food, propose creative ways to harmonise food production and the well-being of the environment and to see the younger population enjoying many years of fresh, natural, real food.

Make any other remarks as you may wish

One of the keys for better nutrition is the knowledge and practice of growing and cooking one's own food. Valorising traditional knowledge is also important; science should not dismiss age-old wisdom. I want to highlight the importance of respect for diversity: diversity of people, diversity of solutions and diversity of food systems.

Raj Patel



S'buZikode, my friend and mentor, a former petrol-pump attendant, now leads the Abahlalibase Mjondolo shack-dwellers movement, which is now the largest independent movement in South Africa

What mainly determines population well-being, health, and disease?

Good health is helped by sanitation, decent healthcare, an end to absolute poverty. Well-being is helped by strong community bonds, relative equality, social security, connection with the social and natural world, attainable ideals of 'the good life'. None of these things need co-exist with capitalism. If they do, it is because people have fought for them.

Which brings us to the question of...

What mainly determines good population nutritional status?

What mainly determines good population nutritional status is the extent to which people have been able to capture the benefits of modernity and leach it of its toxins. For instance this means modern plumbing, clean water and sanitation in cities, without cities becoming islands of the ultra-wealthy. It means better understandings of how to handle, grow and share food without the food system being surrendered to those who would ultra-process everything.

How useful are the current nutritional sciences?

To whom? We're only just starting to enter a time when nutritional science is democratically accountable, rather than a satrap of the state or capital.

Are enough governments and official agencies making real progress?

For whom and against what? The Brazilian dietary guidelines are, of course, tremendous. What's needed now is movement building elsewhere in the world to push back yet further against capitalism in the food system.

Are current dietary guidelines and nutrition education programmes effective?

Again, for what and whom? The latest initiatives in Africa around the 'New Alliance for Food Security and Nutrition' are almost comically bad. Sure, it's important to iodise salt and provide paid maternity leave. But in Malawi, for instance, these optional nutritional interventions have been hitched by the G8 to mandatory requirements like 'improving score on Ease of Doing Business Index' or making land available to foreign buyers.

Nutrition has never been free of other interests – whether of state concerns around fit soldiers, or of business concerns for profit and market. The latest stage of nutrition programmes in Africa is worrying. They are so utterly bought and paid for by the private sector. There are many examples that suggest the era we're moving into that that of Poverty with Added Vitamins.

What types of civil society groups are most responsive to the big issues?

Those that are accountable and democratic. *La Via Campesina* for instance.

Name up to three inspiring leaders likely to be active to 2030, with reasons

I'm not a fan of leader-ology. In Millau in France, when farmer José Bové caught the world media's attention with a terrific moustache and a tractor crash into a McDonald's, his fellow activists and farmers worried that his being anointed to the demi-gods of the alter-globalisation movement would affect him, and the movement they had struggled democratically to build. In one of Millau's local cafés, there's a sign that reads *Ni dieu, ni maître, ni José Bové*. Neither God, Master, nor José Bové.

There are extraordinary individuals working to transform the world today. But the best of them are conscious of the structures in which they lead, reluctant to remain at the front lest they prevent others from learning to lead. The first of these is my friend and mentor S'buZikode, a former petrol-pump attendant in Durban, South Africa, who now leads the Abahlalibase Mjondolo shack-dwellers movement, the largest independent movement in South Africa. His example of leadership, democracy and humility in learning from mistakes is one we might all profit from.

Second, Anita Chitaya, whom I met with the film and book project I'm working on with director Steve James (his film *Hoop Dreams* is a masterpiece, if you haven't seen it, you ought to). We met Anita in Bwabwa, her village in northern Malawi, a few years ago. She has been helping to transform lives of thousands of women and men through agro-ecological research, farmer training, helping men to start cooking, and women's empowerment. The measure of her leadership is the number of leaders she has nurtured, and will continue to develop.

My third leader I call the Unknown Activist, who will continue to fight for freedom far more reliably and with far more success than any poor soul killed on a battlefield. The Unknown Activist may be the Occupy member who defends a home against foreclosure. The volunteer at a food bank who decides that food banks are an insult, and who vows that no society should need a food bank in the future. The farmer who experiments with intercropping and gives her ideas and seeds away. The indigenous seed saver who prevents the corporate enclosure of thousands of years of knowledge. The cook who teaches children the joy of real food. The teacher who gives the gift of critical thinking. Anyone who cracks open the world to reveal the possibilities beyond this one, and lives the politics that will get us there.

Identify up to three of your greatest fears, with reasons

I worry about the politics of imagination, and the imagination of politics. Presenting to students here in the US, I am concerned about the lack of hope for a better world. I grew up in a time where one could be educated without falling into debt. Many students today cannot see how that is possible or desirable. They dream neoliberal dreams, and imagine the only way to get better things is to elect better leaders.

Identify up to three of your greatest hopes, with reasons

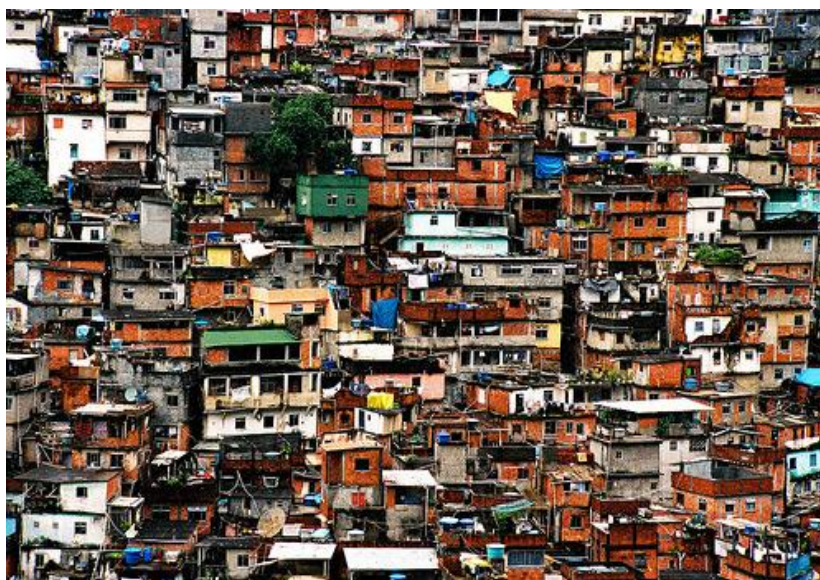
Luckily, many people understand that there are dialectics between leaders and led. History's great moments have come through active, intelligent, widespread organization in which people have been encouraged to think for themselves. Agroecology embodies this kind of principle – in which everyone is a scientist, activist, critic, transformer and, finally, a penitent before nature.

The spread of these ideas through organizations like *La Via Campesina*, through urban food movements is a source of inspiration. We cannot build a better world without tearing down the rapacious elements of this one. You cannot have a monoculture and a polyculture in the same place at the same time. The monoculture must give. This means uprooting industrial agriculture – fighting its predations, its power, its representatives, its culture, its lies, its policies. Not easy. Yet I'm given hope by the millions of people who think it is possible, and fight this fight daily.

Make any other remarks as you may wish.

Thank you for your time.

Mark Wahlqvist



The greatest challenge now is to avoid ecosystem collapse, with all this implies. There are too many of us, often living in misery. Population growth must be slowed, stopped, and reversed as a top priority

What mainly determines population well-being, health, and disease?

There is still too much attention paid to the proximate, measurable (and often profitable) factors that shape population health. These neglect well-being, and treat rather than prevent disease. For example, hypertension is correctly identified as the globally most prevalent and preventable immediate cause of disease and premature mortality. But it is the causes of hypertension and other preventable disorders and diseases that need to be identified and addressed.

More valuable yet, is to define and achieve positive good health and well-being, whose determinants include personal and community security; basic needs met; avoidance of want; secure livelihoods; secure values; scope to hope and dream; and access to information. They also include stable and respectful social structures; essential infrastructure for hygiene, health care, education, transport, communication; localities with ecological integrity; and health literacy and resourcefulness. But the majority of the world's population cannot achieve or even aspire to these states. So the next question is, why is this? Two reasons need addressing. One is that there are too many of us humans on the planet. Another is that we humans now tread heavily on the environment, ecosystems and the biosphere.

What mainly determines good population nutritional status?

There are four principles that underpin nutrition for optimal human health. One is well-nourished parents at conception and during foetal life. Two is breastfeeding. Three is regular physical activity. And finally, four is consumption of adequate biodiverse foods.

On diet, we need to know the sources of the foods we eat, and what has been done to foods before they are acquired and consumed. It is also vital to prepare and eat food ourselves, as often as possible with others. Heredity influences states of health but is almost always modified by how we live, and implies a keen sense of responsibility for subsequent generations.

On physical activity, a good guide is the equivalent of the amount needed for the basic needs of humans evolved to forage, cook, and to find shelter, make clothes, have a family and participate in a community. Avoiding substance excess and abuse of tobacco, alcohol, betel nut or medication without a medical indication is also necessary. Nutritional equilibrium implies regular six to eight hours' sleep.

How useful are the current nutritional sciences?

Not as much as they should be. The need to make them more useful was the reason for the *New Nutrition Science* initiative, including its workshop meeting in Giessen, Germany in 2005. I participated in the workshop [and its outcomes](#) during my term as president of the International Union of Nutritional Sciences. As stated in *WN* last month, an outcome of the workshop, which all participants agreed, is that nutrition is a social and environmental as well as a biological science. The implementation of these recommendations [still has a long way to go](#).

Food science and technology is overwhelmingly preoccupied with 'value-addition'. This means breaking food up into its components with different functions to use as ingredients with purported benefit or to market as 'nutriceuticals'. It also means formulating products from the most readily processed, habit-forming and profitable ingredients. Risk-cost-benefit analysis is rarely undertaken. Worse, the products that result are now so pervasive and intertwined in food supplies that evaluation and monitoring of impact on population health cannot catch up.

We are preoccupied about food safety, while food systems degenerate towards catastrophe. Nutrition science is not watching food science knowledgeably or thoughtfully, and does not sufficiently engage with livestock husbandry or soil science. Health care practitioners are rarely knowledgeable about epidemiology or population nutrition, or able to discern patterns of health status among their patients. This is troublesome. Astute clinical observation has time and again provided crucial insights into population nutrition. But now the pace of change in the industrial food system defies appreciation even by nutritionally keen health care workers.

Are enough governments and official agencies making real progress?

No. Few governments or agencies have risen to the occasion. Indeed, some governments in advanced economies do not support vigorous international campaigns to reduce poverty and hunger. This smacks of inhumanity. It is a political trend, based on excessive trust in and devolution to corporations.

The UN System's Millennium Development Goals, which end next year, have had mixed success. They seem to have encouraged improvement of global child nutrition. But Sub-Saharan Africa and South Asia lag behind. Most progress has been made in China and South-East Asia. An encouraging development is the United Nations University International Institute for Global Health, based in Kuala Lumpur. The Institute acknowledges the key place of food security in human health and its dependency on sustainable ecosystems. It is joining forces with the Institute for the Urban Environment in Xiamen, China, now the administrative centre for the International Council for Science programme which, in an earlier form, I chaired when President of IUNS. The Xiamen centre will be inaugurated this month.

Are current dietary guidelines and nutrition education programmes effective?

It is questionable. The development by WHO and FAO of food-based dietary guidelines in 1995 was a major step forward, and these have been adapted in various locations, such as the Western Pacific. But there is far to go to push nutrition policy and education more towards food, meals and dietary patterns. Nutrition and health policy still remains the prey of commercially-orientated nutrient programmes. These at best are only partial solutions. The underlying factors are overlooked. Besides, education and guidelines are never enough. [*What is needed is a complete shift*](#), to strategies that empower populations, communities and households.

What types of civil society groups are most responsive to the big issues?

Social movements that operate at the grass-roots and that are not easily 'bought off' by moneyed or sectoral interests.

Name up to three inspiring leaders likely to be active to 2030, with reasons

Malala Yousafzai, born 1997 in Mingora, Pakistan, Nobel prize winner, for leadership in women's education, especially among religiously-disadvantaged peoples. Another is the person who will inspire and guide the most effective ecosystem-restoration and maintenance movement. The third is the person who will create the most effective personal and household renewable energy-producing and storage system.

Identify up to three of your greatest fears, with reasons

One is catastrophic ecosystem collapse. Two is extreme and prolonged drought affecting the most populous and most important food-producing regions, such as

northern India, northern and western China, Australia, and the US. Three is uncontrollable and untreatable pestilence among people and livestock, such as antibiotic-resistant genes that may cause zoonotic epidemics in Chinese and American livestock treated unnecessarily with antibiotics as growth promoters.

Identify up to three of your greatest hopes, with reasons

That China becomes a peace-maker in troubled regions by deploying its massive human and economic resources. That locally appropriate renewable energy production and storage becomes available, before irreversible ecosystem loss through the now grotesque ongoing mining of fossil fuels. That human population size is arrested at the earliest possible time by intensive family planning wherever total fertility rates exceed an average of 1.8 children per couple.

Make any other remarks as you may wish

Whether the tide of human and ecological nutrition affairs can be turned in the diminishing time-frame available before habitable ecosystem collapse occurs, depends above all on four factors. One, slowing, stopping and reversing population growth. Two, arresting ecosystem destruction, particularly that caused by energy production at the cost of food and water security. Three, better strategies to resolve conflict, including agreement to meet basic needs in less materialistic ways. Four, providing satisfying and productive livelihoods in all populations and communities.

Status

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Please address letters for publication to wn.letters@gmail.com. Letters should usually respond to contributions to *World Nutrition*. Usual length for main text of letters is between 350 and 1000 words. Any references should usually be limited to up to 10. Letters are edited, may be developed, and once edited are sent to the author for approval.