



Robert B. Daugherty Water for Food Institute at the University of Nebraska

Strategic Plan

FOREWORD

This initial strategy of the Robert B. Daugherty Water for Food Institute at the University of Nebraska represents a first outcome of the Institute's strategic planning process, and is intended to provide a framework or guide for the institute's initial activities. It has been prepared taking into account faculty and Board feedback on a first working draft that was discussed with faculty across all four campuses in the fall of 2012 and subsequently revised and shared with the Board of Directors, prior to approval by the Board in May 2013. Since the Institute is in the early stages of development, the strategy is deliberately flexible. In 2015 the strategy will be updated, if necessary, and be operationalized through a five-year plan that will cover the Institute's second full phase of operations, starting on 1 July 2015.

EXECUTIVE SUMMARY

The Water for Food Institute was established to address the global challenge of achieving food security with less water through improved management and use of water in agricultural and food systems. Our goal is to ensure sustainable global food security in the face of a changing climate and the growing demand for scarce water resources to meet other human and environmental needs.

Vision and Mission: Our vision is a food and water secure world, where global food security is ensured without compromising the use of water to meet other pressing human and environmental needs. Our mission is to have a lasting and significant impact on achieving more food security with less pressure on scarce water resources by (1) conducting scientific and policy research and developing advanced decision-making tools and knowledge delivery systems, (2) using the results of scientific and policy research to inform policy and advise policy makers, and (3) educating the necessary human talent.

Program strategy: In keeping with our mission, our program rests on three thematic pillars – research, policy analysis and advice, and education and engagement. We work in Nebraska, the U.S. and other parts of the world facing critical water for food challenges. Our work is carried out at multiple scales and in a range of different contexts, building on our three main comparative advantages: (1) our location at the center of one of the world's most important food producing areas, with extensive irrigated and rainfed agriculture and innovative management of water for agriculture; (2) our position as a part of a leading land-grant university with considerable expertise in a range of disciplines related to water and food and a tradition of connecting research with practice; and (3) the generous gift from the Daugherty Foundation and the significant leveraging opportunities that this provides.

Institutional Strategy: We are a 'distributed institute,' drawing on affiliated faculty from departments and colleges across all four University of Nebraska campuses through creative internal arrangements, and expanding our reach through strategic partnerships with other universities and research groups, public and private institutions, and NGOs. Our institute includes a small number of core administrators, staff, research fellows and graduate students; Centers that are an integral part of the institute; affiliated faculty from diverse disciplines; and a set of flagship programs. In Nebraska, we work through our faculty affiliates and the Nebraska Water Center, an integral part of the Institute which has a long track record of engagement with people and institutions throughout Nebraska. Nationally and globally we work through our faculty affiliates and strategic partnerships. In all our work, we build bridges across disciplines, across the water and agriculture/livestock communities, across the public and private sectors, and across the worlds of small- and large-holder agriculture.

Introduction

This initial Strategy of the Robert B. Daugherty Water for Food Institute at the University of Nebraska has been prepared taking into account faculty and Board feedback on a first working draft that was discussed with faculty across all four campuses in the fall of 2012 and subsequently revised and shared with the Board of Directors at its November 2012 meeting. It was prepared for final approval by the Institute's Board of Directors at its meeting in May 2013.

Since the Institute is in the early stages of development, the strategy is deliberately flexible; its main purpose is to provide a framework or guide for the institute's initial activities. Four Annexes (in preparation) provide more details on the local and global water for food challenge, other local and global players in the water for food arena, the history of DWFI to date and DWFI stakeholders, and NU's track record of achievements in relevant fields. The FY2014/2015 operational plan, contained in a companion document, provides more details of those activities from 1 July 2013 until 30 June 2015. In early 2015 the strategy will be reviewed and updated, if necessary. In addition, a second, five-year plan will be prepared to cover a second, full phase of operations, starting on July 1 2015.

The Challenge

The challenge that the Institute was established to address is undoubtedly one of the most urgent challenges for the 21st century, with significant political, environmental, social and economic implications: how to achieve more food security with less pressure on water resources. To ensure sustainable global food security in the face of a changing climate and the growing demand for scarce water resources to meet other human and environmental needs, we will need to improve significantly the management and use of water by and for agricultural and food systems.

Achieving global food security – by which we mean ensuring that everyone, everywhere, has access to enough safe and nutritious food for a healthy, active life – is commonly viewed as resting on three pillars: physical availability of food, access to food (ability to either produce or purchase food), and food use at the household level. The effective management and use of water is vital for each of these three pillars. Water is a critical input for both crop and livestock production and consumes the lion's share (70%) of the world's freshwater resources. Water also plays a vital role in the generation of livelihoods and overall economic growth that is required to ensure economic access to food supplies by the world's most vulnerable people. And access to safe drinking water and basic sanitation by poor households is critical to ensuring that food use at the household level is safe and that caloric loss from water fetching and diarrheal diseases does not negatively impact nutritional levels.

The effective management of water by and for agricultural and food systems to ensure food availability in the years to come is a particularly critical issue. Ensuring future food availability needs to take into account that food requirements are expected to double by 2050 not only because of population growth but also because of rapidly rising incomes and changing diets in many parts of the developing world. At the same time, rapidly increasing water requirements to meet human, industrial and environmental needs, coupled with rapid urbanization and increasing degradation of water resources in both quantity and quality terms, means that the water supplies available for agricultural purposes in the years to come will be much more limited than at present – a situation that is likely to be inherently more complex as a result of climate variability and change. All this will require significant improvements in water productivity, a measure of the amount of water needed to produce an amount of output such as food or fodder.

Achieving more food security with less pressure on scarce water resources requires a holistic perspective that goes significantly beyond increasing 'crop per drop.' It involves improving the use of water not only in crop production systems but also in livestock production, integrated cropping/fisheries/livestock systems,

and food production processes. Efforts to increase food production need to be complemented by efforts to reduce food waste, which is also water waste.

In many countries considerable gains have already been made in raising the productivity of water for crop and livestock production, but there is still considerable scope for improvements across the world. Better land and water management are crucial in bridging the existing yield gap between high-yield and low-yield farms, whether expressed per unit of land or per unit of water consumed. Plant breeding for abiotic stress conditions, biotechnology and molecular biology, precision irrigation, deficit irrigation and soil conservation, groundwater management and recharge, improved farming practices, and proper incentives and institutional arrangements all play a role in enhancing crop and livestock water productivity.

Ensuring the sustainability of agro-ecosystems in water-limited conditions is a particularly important challenge at basin, agro-ecological and higher scales. In many watersheds, the key challenge is to find ways to reconcile the use of water for agricultural purposes with the need to allocate water to maintain environmental services. At the watershed and agro-ecological levels sufficient water should be reserved for maintaining environmental flows, biodiversity, and local livelihoods. Economic, biological, ecological, social, political and institutional studies of agro-ecosystems in water limited conditions are required to analyze trade-offs and develop adaptive capabilities and ensure sustainability of agro-ecosystems.

Most if not all the challenges described above are relevant both locally in Nebraska and globally. Efforts to improve crop per drop and to reconcile agricultural water use with the allocation of water to maintain environmental services are strong concerns in Nebraska. And Nebraska's experience in these areas is an important contribution to global efforts to improve agricultural water management. Nebraska farmers are recognized as innovators not only in irrigation technology but also in the use of soil moisture sensors, drought-resistant crops, conservation agriculture and other technologies and methodologies to improve crop per drop. Nebraska policy makers are also recognized as innovators at an institutional level: the pioneering 1972 decision to establish Natural Resource Districts¹ has provided an effective institutional framework for managing the groundwater resources that are so vital to the state's agriculture, and for reconciling agricultural and environmental water needs. The fact that in the recent drought Nebraska's crop yields, while significantly reduced, were not impacted as severely as would have been expected, makes clear that these innovations have paid off.

Importantly, all these challenges play themselves out at a range of different scales – from the household, farm, community and watershed scales, all the way up to basin, state/province, national, regional and global scales. The challenges also play themselves out in a variety of different contexts, from the large-holder highly productive water and food systems characteristic of Nebraska and other food exporting countries to the more vulnerable small-holder producer systems in Sub-Saharan Africa and the Indian sub-continent. Clearly, the availability of water, the requirements for food production and other purposes, the technology and policy options available to address the challenges, are all driven by local conditions. Problems and potential solutions differ substantially region by region, country by country, basin by basin, watershed by watershed, and farm by farm.

Addressing these challenges will thus require scale- and context-specific science and research-based solutions. Indeed, it is hard to see how we could address these challenges without a marked increase in innovation and in our basic understanding of the natural and human dynamics underlying these water and food processes. But the current pace of innovation in water productivity is still low in relation to other sectors such as energy or communications and especially in relation to the scale of the challenge. To improve productivity we will need combinations of technological, social, institutional and policy innovation, coupled with efforts to ensure adoption, which is often constrained by lack of appropriate supply chains, technical assistance, markets, and incentives.

¹ Watershed-based governance entities led by a locally-elected Board of Directors

Our Vision and Mission

The Robert B. Daugherty Water for Food Institute at the University of Nebraska, established in 2010 through a generous \$50 million grant from the Robert B. Daugherty Foundation, was created precisely to address this need for innovation in water productivity. Our vision is for a food and water secure world: one in which global food security is ensured without compromising the use of water to meet other pressing human and environmental needs. Our mission is to have a lasting and significant impact on achieving more food security with less pressure on scarce water resources, by conducting scientific and policy research, using the results of research to inform and advise policy makers, and educating the necessary human talent.

The Institute's overarching and unifying theme is thus "more food security with less pressure on water resources," and its one overarching and unifying concept and metric is water productivity, viewed as a broad multi-dimensional and multi-scale concept. Internally this theme will serve to galvanize and inspire the work of the large number of faculty and scientists across the university working on water and food issues from a variety of disciplinary perspectives, in a number of different contexts and at a range of scales. Externally, the central theme will serve to signal clearly what this institute offers that is different from others.

In keeping with the global nature of the challenge, our institute will work both locally, i.e., near our home base in the center of one of the world's most important food producing areas, nationally, and globally, i.e., in other parts of the world facing critical water for food challenges. The need for this broad focus has been clearly demonstrated by the drought in the Midwest of the US, which has shown that a severe water challenge in a major food producing area can have immediate impacts on the food security of poor households throughout the world. In Nebraska, the institute will work principally through its faculty affiliates and the Nebraska Water Center (NWC), an integral part of the Institute that has a long track-record of engagement the institutions and the people of Nebraska. Globally, the institute will work principally through its faculty affiliates and strategic partnerships.

To maximize the opportunities for innovation that this broad scope provides, our institute will build bridges across the worlds of large-holder and small-holder agriculture, which traditionally have moved in different circles and not talked much to one another. We will also bridge different communities of expertise and focus, in particular the water community and the agriculture/livestock communities as well as the specialized disciplines within these communities, which too often also move in different circles, belonging to different professional associations and attending different professional conferences. These are not easy bridges to build. In taking on this task, we need to expect that this work will be challenging and not always appreciated by all stakeholders.

Our Comparative Advantage

Given the magnitude of the challenge and the existence of other players in the field, it has been essential for DWFI to define as clearly as possible what it is uniquely qualified to contribute to the global effort. Elements of the Institute's existing comparative advantage include:

- The Institute's location in one of the world's most important food producing areas and in a State with more irrigated area than many countries, and a reputation for innovation in the management of water for both rainfed and irrigated agriculture

- The establishment of the Institute as an integral part of a land-grant university with significant expertise in a range of disciplines related to water and food², a tradition of connecting research with practice, and an explicit training and education mandate
- The University's specialized centers of expertise, including in particular the National Drought Mitigation Center, which is playing a central role in the current drought across the United States, the Center for Plant Science Innovation and the Colleges of Public Health and Business Administration, which provide opportunities for creative collaborations (see Box 1)
- The University's expertise in areas of particular global relevance, including agronomic modeling and mapping, animal science (to address issues of water productivity in relation to livestock and the water challenges arising from changing diets across the world, especially in developing countries) and groundwater management³
- The strong opportunities for collaboration with the private sector that derive from established relationships with Nebraska companies, our frequent interaction with private sector partners at our Water for Food Conferences and other venues, and our forthcoming location at the Nebraska Innovation Campus, designed to promote public-private research and development in food, water and fuel
- The existence of the generous gift from the Daugherty Foundation and the leverage opportunities that this provides

Importantly, while NU has considerable existing research in a range of disciplines related to the water/food challenge, in many respects these basic assets are similar to those at other land-grant institutions. However, because the nature of the DWFI's vision and mission requires bold steps forward, the Institute will adopt creative internal arrangements in its approaches to faculty affiliation and grant-making, which we believe will also enable DWFI to distinguish itself amongst its peers in research productivity and optimize DWFI's probabilities of catalyzing major leaps in understanding. These approaches are described in the section on institutional strategy below.

Box 1: Creative Collaborations

The strong engagement of the College of Public Health at the University of Nebraska's Medical Center in the development of the Institute provides a special comparative advantage in the area of water, food and health. DWFI has a high potential to foster creative collaborations among specialists in water, food and public health, across all its pillars of activity (research, policy and education) and across all its areas of research focus. Examples of such creative collaborations include analyses of the health implications of water re-use for agriculture and of seasonality in water and food systems; systems approaches to better understand the unintended consequences of water/food policies on health; the interactive use of hydro-informatics and population-based social/behavioral informatics tools; the use of Health Impact Assessments in addressing water for food issues; and studies of the impacts of floods and droughts on the health of vulnerable people, especially women and children .

Program Strategy

The DWFI program rests on three thematic pillars – scientific research, education and engagement, and policy analysis and advisory services. Institute activities and outputs will cluster around one or more of these pillars, and will include:

² These disciplines include water, agricultural and natural resource sciences, including food processing; earth and atmospheric sciences; social sciences; formal and informal science education; computer science and engineering; civil engineering; public health; and law, economics and public policy.

³ Most of Nebraska is underlain by the massive High Plains Aquifer and has been able to avoid the serious water level drops that characterize the aquifer's southern portions

- Conducting scientific and policy research⁴ and educational programs on the efficiency and sustainability of water use in agriculture, with special attention to the technical, social, and institutional innovations needed to increase water productivity, including improved technologies and crops, better management practices, and more effective institutional and governance arrangements.
- Using the results of scientific and policy research to inform policy and advise policy makers, and developing advanced decision-making tools and knowledge delivery systems to inform and guide policymakers, managers and the public in managing water resources.
- Educating the human talent necessary to accomplish this mission.

Integral to the success of this work are strong partnerships to help us carry out our work and communicate results.

All elements of our program will contribute to our mission and lead to one or more of the specific plan period objectives. Institute activities will be driven both by demand (stakeholder needs) and supply (areas of faculty strength, opportunities). The Institute will have a culture of impact assessment, learning and evaluation.

The Institute's scientific research, policy analysis and advisory services, and education and engagement programs will address the water/food challenge in a number of different contexts, both locally and globally, at one or more scales from the farm on upwards, and cover issues facing a range of producers, from small to large:

Scientific Research: Programs will focus on innovation in technologies and management practices and their practical application; they will emphasize data collection, analytical thinking and evidence-based decision-making, and will enable contextual contrasts (e.g. Nebraska and globally)

Policy Research: Research will encompass both the critical application of the natural and social sciences to assess specific interventions (policy analysis) and the development of mechanisms and policy instruments to achieve policy goals (policy design) and will focus on science-based policies that are firmly grounded on technical considerations. The Institute will encourage data- and research-based policy dialogue in a variety of forums and at various levels, including at its annual Water for Food Conferences.

Education and Engagement: In keeping with the Institute's mission, there will be an on-going emphasis on educating the next generation and engaging young talent. Our educational strategy will be based upon engagement and an assumption that all participants are sources of knowledge as well as learners, drawing upon resource people with experience in academic teaching, extension, web-based education delivery, adult learning and behavioral change. In doing so, we will work in close partnership with the University's Extension experts on all these efforts.

Institutional Strategy

Our institutional strategy is based on the concept of the institute as a 'distributed institute,' drawing on faculty affiliates and other resources across all four campuses and disciplines of the University, adopting creative internal arrangements in its approaches to faculty affiliation and grant-making to optimize capacity to foster innovations and research breakthroughs, and expanding its reach through strategic partnerships.

From its inception, the vision for DWFI has been that of a non-traditional institute that would not have its own faculty and scientific personnel, but instead work as a creative network with several constituent parts,

⁴ In this document, we use the term scientific research to include research in the natural and social sciences, including economics. We use the term policy research to include both policy analysis (research involving the critical application of the natural and social sciences to assess specific interventions) and policy design (research to develop mechanisms and policy instruments).

The Institute will be strengthened by national and global partners including other universities, public sector institutions, private sector partners and NGOs. The core administrators and staff, i.e., the “DWFI core,” will have a central role in raising funds and in supporting faculty affiliates to do so, in communications and public relations, and in establishing, maintaining and servicing partnerships. DWFI will have modest physical facilities, with most research work carried out through association with affiliated faculty and partner institutions. The Institute (or more precisely the “DWFI core”) will be one of the initial groups to be located at the Nebraska Innovation Campus, with facilities expected to be available in early 2014.

While the core institute will spearhead selected flagship programs (see companion document describing Operational Plan for FYs 14 and 15), the broader work of the many faculty addressing water/food issues locally and globally will also be considered part of the institute’s programs. In this way, the Institute will become the intellectual umbrella under which water for food-related research and policy analysis undertaken by NU can find a welcome home. Over the Plan period, the Institute will work to find ways to support and inspire the work of faculty working across the university to contribute to its mission.

DWFI Core. The DWFI administrative core will consist of the Executive Director and his/her leadership team (Associate Director, the Directors of Research and Policy, and the Director of the Nebraska Water Center), a small support staff, a small group of International Research Fellows and Visiting Scholars, and the staff of the NWC, which will continue to focus on engagement with Nebraska water, agriculture and natural resources stakeholders.

Affiliated Faculty. As a distributed institute drawing on the expertise of the entire University of Nebraska system, the faculty members affiliated with the Institute will be integral to its success. A critical component of the Institute’s affiliated faculty will be the DWFI faculty ‘cluster hires’, who were recruited specifically to contribute to the DWFI’s work and who are beginning to play an important role in the Institute’s programs. Initial faculty affiliates also will include, but not be limited to, faculty members who identify with the Institute’s mission and vision and have received DWFI competitive grants funding, collaborated with DWFI on developing and submitting grant proposals, or hold positions supported by the Water Resources Research Initiative Program of Excellence. The DWFI will create a structure for faculty affiliation that is uniquely suited to its mission, building on successful models within the NU system and drawing on the results of the study by an external consultant recently commissioned by DWFI⁵; under this structure, faculty affiliates will receive a variety of benefits, including assistance in developing teams and submitting grant proposals where the Institute is a partner, DWFI faculty titles, and involvement in regular interdisciplinary research dialogues.

Affiliated NU Centers and Programs. NU centers and programs that work in areas related to water for food may wish to affiliate with the DWFI. A structure for this affiliation also will be developed.

Advisory Bodies. The Institute has both internal and external advisory bodies. Internally, the Institute’s Executive Director benefits from the advice and support of an internal Working Group, which includes the President and senior leadership of the University and which meets quarterly and a Faculty Advisory Board. Externally, the Institute is advised by an International Advisory Board⁶, which provides guidance to the Institute’s leadership on the research, policy and education programs of the Institute, and links the Institute with the expertise of outside specialists as well as the users of DWFI’s products and services. With respect to work in the State of Nebraska, the University as a whole is guided by the Water Resources Advisory Panel established in 2006 to connect the University with outside experts and Nebraskan research users and other stakeholders, while the NWC is guided by an advisory board made up of faculty and stakeholder agencies.

⁵ This consultant met one-on-one with 75 key faculty and administrators to survey their ideas for developing a structure that will incentivize faculty to affiliate with DWFI and meet the needs of both the faculty and of DWFI. The consultant’s report, available on request, has had a considerable impact on the drafting of this strategy document.

⁶ Currently being established

Governance. The DWFI is governed by a Board of Directors, which is chaired by the President of the University of Nebraska and also includes the CEO of the Robert B. Daugherty Charitable Foundation and the CEO of the Bill & Melinda Gates Foundation. Within the University of Nebraska, the DWFI Executive Director reports to the Vice President and Vice Chancellor of the Institute of Agriculture and Natural Resources of the University of Nebraska.

Gap-filling and Capacity Development. Given our challenging mission, we will support University efforts to build additional faculty capacity in subject areas that are critical to our mission but which currently constitute gaps in the University's faculty profile. Though NU has considerable expertise in a wide range of disciplines related to the water for food challenge, and additional expertise has recently been added through the 'cluster hires' in such areas as systems agronomy and hydro-informatics, there are still some gaps that need to be filled if DWFI's vision and mission are to be achieved. An initial list of faculty needs is being prepared for internal discussion. Strengthening expertise in some areas, such as in the technical, social, economic and institutional issues relating to small-holder irrigation, may require multi-pronged strategies for gap-filling, including through partnership arrangements with other institutions, International Research Fellow and visiting faculty appointments, and part-time Senior Advisors.

Partnership Strategy

From its inception, the DWFI was envisioned as developing cooperative research programs with organizations working nationally and internationally, to enable access to complementary expertise and to extend its global reach. Annex 2 provides details of the many organizations from which the Institute will strategically choose its collaborators and colleagues. They will almost certainly come from one or another of the following groups: Universities in the U.S. and internationally; UN organizations, especially FAO and UNESCO; the CGIAR centers, notably IWMI, ICARDA and IFPRI; business partners and industry-led centers of practical innovation; international water networks, such as the World Water Council and the Global Water Partnership; national Governments and governmental institutions; and national and international NGOs.

DWFI has already begun exploring and developing collaborative programs, and has formal agreements – directly or through the University's Institute of Agriculture and Natural Resources, with several operational partners, including UNESCO-IHE in Delft, the Netherlands, the University of Sao Paulo in Brazil, USAID and the USAID Water Centers of Excellence for the Mid-east and North Africa, the Food and Agriculture Organization (FAO) of the United Nations in Rome, the Institute for Development Enterprises (iDE) in Denver, Jain Irrigation in Jalgaon and the Water Technology Centre of the Indian Agricultural Research Institute in India, and the Institute of Water Resources and Hydropower Research in Beijing, China

Elements of the Partnership Strategy are currently under consideration, and will be developed in the form of a DWFI Partnership Policy document. This document will outline the criteria for selecting partners and for ensuring that partnerships are effective, outline different forms of partnerships and/or different stages in the partnership process, provide guidelines on partnering with private sector entities, and specify roles and responsibilities in securing and maintaining effective partnerships.

A critical part of the Institute's partnership strategy will be to leverage the initial resources provided by the Daugherty Foundation. To do this, it will need cost sharing or fund-leveraging partners and funding from competitive grants from government agencies and other grant-making institutions. Developing an effective capacity to leverage funds based on a clearly defined strategy will be a key priority during the initial years of the Institute's development. Such a funding strategy is likely to require several prongs, including targeting competitive grants from NSF, USDA and other government agencies and grant-making institutions, pursuing funding from development agencies such as USAID and private foundations concerned with international development issues, and tapping into corporate support where relevant and appropriate.

Communications Strategy

The communications activities of the DWFI will play a key role in achieving the goal of developing the Institute's reputation with the widest possible array of stakeholders. A specific strategic plan for communications and engagement, consistent with the Institute's program strategy, is being developed by DWFI in collaboration with the NU President's office.

Importantly, the Institute's communication strategy must consider both internal and external stakeholders. Internally, the Institute needs to engage the University of Nebraska community, to foster a sense of mission and common goals and ensure that faculty can contribute effectively to the Institute's mission. Externally, the institute must reach stakeholders both within Nebraska, who have high expectations that the institute will address issues of relevance to Nebraska and will benefit from its global engagement, and within the international community. Many of the latter stakeholders at present are largely unaware of the Institute's existence; initial engagement activities will therefore need to focus on putting the Institute on the map as a global player.

With both these external stakeholder groups, engagement must be targeted at several levels, depending on the desired outcome. These include higher education institutions; a range of actors in the agriculture sectors, including producers, commodity groups, departments of agriculture, private sector industries and public sector groups; a range of actors in the water and natural resources sectors, including Natural Resources Districts and the Departments of Natural Resources and other relevant state agencies in Nebraska and their equivalents in other parts of the US and the world; private sector industries, public sector groups and non-governmental organizations; the education community; the general public with an interest in these areas (now a group that can be reached globally through web-based communications); and funding partners in the public and private sectors as well as foundations and philanthropies in the U.S. and globally.

Elements of the communications strategy will include:

- The annual Water for Food Conference, which will be held both in Lincoln, Nebraska, as at present, and in other locations (as discussed in greater detail in Part 3). The annual conferences will be complemented by lectures, seminars, and workshops in Nebraska and at other sites in the US and internationally, and participation of and presentations by faculty in key conferences and meetings.
- Web-based communications and the use of social media. This will be the major focus of DWFI engagement, for most efficient and effective global reach; all communications will drive the user to a highly functional, interactive website. Ultimately, the aim will be to be the best world-wide social media communicator in water and food issues, developing a futures-driven internet presence for the Institute – an interactive, global conversation presence.
- Strategic communications/marketing materials. These will be made available in print and electronically as appropriate and include regular communication from the Executive Director, annual report, and materials targeting specific issues, events, etc.