



Global Plant Council (GPC) Forum on Biofortification

5-6th July, Xiamen China

Rationale

In 1996 the World Food Summit defined food security as existing “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”. Although good progress has been made towards reducing world hunger through initiatives such as the Millennium Development Goals, the numbers of people who are still under- and malnourished today remains disturbingly high. It has been recently estimated that 868 million people (which represent 12.5% of the global population) do not have enough food to eat for their minimum dietary energy requirements, while 2 billion people suffer from one or more micronutrient deficiencies. At the same time 1.4 billion people are overweight and 500 million of these are obese, triggering new public health epidemics in developed and emerging nations including more people suffering from chronic conditions such as type 2 diabetes and cardiovascular disease (FAO State of Food and Agriculture report 2013).

Plant and Crop sciences can help to generate solutions to these global problems through a variety of strategies, including increasing yield and nutrient levels in staple crops, producing crops that provide beneficial nutrients such as anti-oxidants, healthier oils and starches, and diversifying the types of crops to be consumed. Together with socio-economic initiatives such research-based strategies can contribute to providing a balanced and nutritionally adequate diet.

Reflecting the central importance of plants and crops in the food chain there are already a number of initiatives across the world that are focused on improving the nutritional value of crops by increasing micronutrients and vitamins, and also by enhancing the levels of ‘phytonutrients’ with proven health benefits. However, these efforts operate at different scales with varying degrees of integration and communication. International cooperation and global coordination is therefore needed to minimize duplication of efforts and maximize impact from investment to deliver improved crops for a healthy nutrition in order to effectively reduce or eradicate global hunger and malnutrition.

The Global Plant Council (<http://globalplantcouncil.org>) has recognized this need and will address it in a forum on biofortification, micronutrient efficiencies and improving the nutritional value of crops in Xiamen China 5-6th July 2014. The forum will bring together key stakeholders to discuss current projects, assess current strategic investments into R&D, and initiate a gap analysis to begin the process of ensuring that current major nutritional needs and future nutritional improvements are met through an international coordinated approach.

The forum provides a unique opportunity for experts from plant, crop, nutrition and political sciences, as well representatives foundations, NGOs (all of whom do not interact on a regular basis) to come together and discuss potential new approaches based on respective expertise, in order to reach a consensus on the strategic efforts that are necessary to contribute to the relief of malnutrition and the prevention and amelioration of chronic diseases.

Global Plant Council (GPC) Forum on Biofortification Draft Programme

Day 1

- 12:30 – 13:30 Lunch
- 13:30 – 13:45 Introductions - Facilitator and Barry Pogson

SESSION ONE - What is being done?

- 13:45 – 14:00 Social Acceptance of Biofortified Crops
- 14:00 – 14:15 Case Study 1 - Plant and Crop Science - Cassava
- 14:15 – 14:30 Case Study 2 - Plant Breeding - Harvest Plus
- 14:30 - 14:45 Case Study 3 - Human Nutrition and Plants
- 14:45 - 15:30 Break
- 15:00 - 15:15 Case Study 4 - A public policy perspective
- 15:15 - 15:30 Case Studies 5 - Stacking nutrients:
Anthocyanins and tomatoes
- 15:30 - 16:00 Discussion, Facilitator Summary and Breakout Group Overview
- 16:00 - 17:30 Breakout Groups Discussion Session 1
Assessment of current projects
- 17:30 - 18:00 Feedback and preparation for day 2

Day 2

- 8:30 - 9:00 Recap of Day 1 outcomes - facilitator

SESSION 2 Are there new or more effective strategies?

- 9:00 - 9:10 Taking a different view - facilitator
- 9:10 - 10:40 Breakout Group
- 10:40 -11:00 Break
- 11:00- 12:00 Report from Breakout groups and synthesis
- 12:00 - 13:00 Lunch

SESSION 3 - What needs to be done?

13:00- 15:00	Breakout Group Session 3 - Looking to the Future
15:00 - 15:30	Break
15:30 – 16:30	Report from Breakout groups and synthesis
16:30 – 18:00	Synthesis of workshop, plan of action and timetable

Draft Questions for breakout groups

Discussion Session 1: What is being done: Assessment of current projects

What are the biggest nutritional challenges facing

- i) Developed Nations?
- ii) Developing/Emerging Nations?

What projects are currently being undertaken across the globe?

Who are the major funders?

What are the major successes/impacts of these projects?

What have been the major failures? Could these be overcome?

How can we best ensure that social impacts are adequately included in future projects?

Discussion Session 2: Are there new or more effective biofortification strategies?

How does biofortification compare to other approaches?

- (i) e.g. Biofortification vs supplementation what are the pros and cons?
- (ii) e.g. How effective is Nutritional Stacking?

Is encouraging and providing populations with access to a more diverse diet a more viable solution?

What are the socio economic gains from biofortification?

Are there areas of the world / specific problems where biofortification can make a real difference?

Are there areas of the world / specific problems where alternatives to biofortification would have a greater impact?

Discussion Session 3 – What needs to be done?

What areas are not currently being covered?

Could a global initiative help to drive any of these areas forward?

In which 5 areas would you focus future internationally coordinated projects?

What would you envisage as the major barrier to these projects? How could these be overcome?

How would you measure success of these ?

How would these projects be structured?

Who would provide the funding?