



## Speaker Summary Note

- Session:** **Prioritizing and Scaling Up Interventions for the Most Optimal Agricultural, Nutrition, and Health Outcomes**
- Speaker:** **Lawrence Haddad**  
Director, Institute of Development Studies, University of Sussex, and Chair, Development Studies Association of the UK and Ireland (DSA), UK
- Title:** **Incentivising Agriculture for More Effective Undernutrition Reduction**

Agriculture cannot be the only or even the main solution to reducing undernutrition—the latter is too multi-determined. But agriculture can do a lot more to reduce undernutrition. Producing food is one thing. But the creation of jobs and income, the empowerment of women and an increased supply of micronutrients are also things that agriculture could do much more of. It would be in agriculture's interests to do so too. This note makes 4 points that might help incentivise agriculture to do more for nutrition while meeting its non-nutrition needs too.

### **1. More impact evaluations: we hardly have any to guide us**

We need more impact evaluations of the small number of agriculture interventions that explicitly aim to improve nutrition. We can then learn from these. My IDS colleague Edoardo Masset has led the completion of a first draft of a systematic review of agriculture interventions which aim to improve nutrition status (1). The initial findings are sobering. 307 studies of agricultural intervention evaluations designed to improve nutrition were found which were published on or after 1990, in English, for developing countries, having data on outcomes (participation, income and expenditure, diet, micronutrients and nutritional status). Of these 307, only 30 reported an impact study on any of the indicators above. Of these, only 23 had credible impact evaluation models which allowed a counterfactual to be modelled. Of these 23 studies, 13 specifically looked at anthropometric indicators of children under the age of 5. Of these 13 studies, only one showed a positive impact on stunting, the rest showed no effect. Of the 13, 5 showed a positive impact on underweight, the rest showed no effect. The really troubling finding is that half of the “no impact” studies had impact designs with too low a statistical power to uncover impacts—even if they were present. Even for agricultural interventions that aim to improve nutrition status, the poor quality of nutrition impact assessment designs runs the risk of squandering public funding.

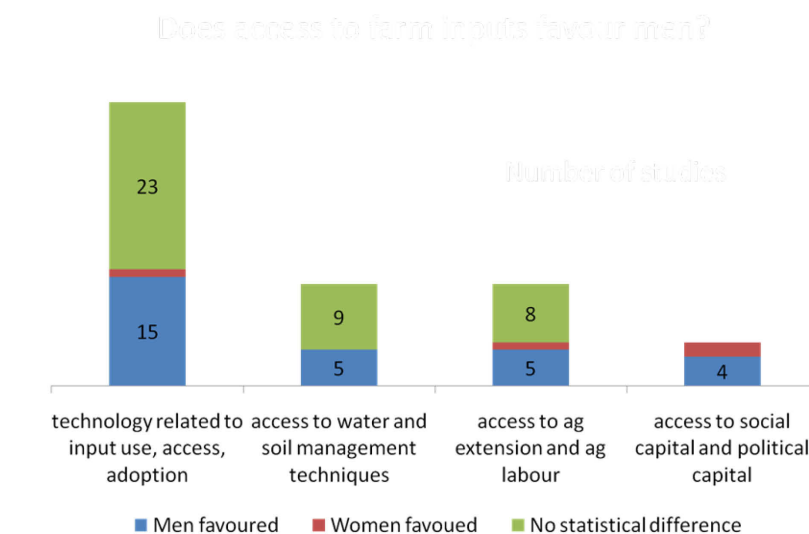
### **2. Use nutrition indicators to assess nutrition impact of agricultural programmes**

If only 30 of 307 studies of agricultural interventions that aim to have an impact on nutrition (including fisheries, livestock, dairy, home gardens) actually contain an impact assessment on nutrition relevant indicators, then something is going badly wrong at a systems level. Either agricultural interventions fail to implement their nutrition components, or they are implemented but there is a failure to collect the indicators or there is a failure to undertake an impact assessment. Why were indicators not collected if the intervention was implemented? Perhaps it is a result of a perception that it is too difficult, perhaps a lack of

resources to do it, or simply a feeling that it is not sufficiently important for the key stakeholders. Certainly it does require a different skill set to collect nutrition outcome data, but the methods are relatively straightforward and not costly relative to other outcome indicators. The same goes for impact assessment. The requirement to collect nutrition outcome indicators and conduct impact assessments would focus the theory of change of the intended outcome—improved nutrition status. Donors have a huge role to play here in insisting that the purpose of the intervention and the indicators align and that creative impact assessments are completed. This is in agriculture’s interests too. It is going to be increasingly difficult for donors to justify funding agricultural interventions –whether or not they explicitly aim to improve nutrition—that only aim to raise productivity and have no ambition to maximise the impact of that productivity on nutrition status. And even if donors can get away with it in the short to medium run, agriculture will lose out in the longer run as it becomes exposed to changing donor tastes with no insurance policy of a demonstrable set of impacts on human nutrition.

### 3. Increasing the women’s control over agricultural decisions and resources

One way of incentivising the greater intertwining of nutrition and agriculture agendas is to create more opportunities for women to influence and shape agendas, decisions and resource flows in agriculture. That is because women are often responsible for both of these agendas. My former colleagues at IFPRI have done a nice recent review paper<sup>1</sup> on this, summarised by the figure below. For half of the comparisons of resource access, there is no gender difference. But for the other half, where there is a difference between male and female access, it is almost always in favour of men. I still find such data shocking and disturbing. At a practical level, it represents an overinvestment in male entrepreneurial energy and an underinvestment in female talent. At a more fundamental rights level, it surely does not reflect a free consensus on how best to grant access to agricultural resources. Citizens should demand more from their governments and the donors. There should be more experiments with quotas, all-women leadership programmes, and innovative approaches to creating the kinds of spaces for change that women can participate in and influence.



Source: Peterman, Behrman and Quesumbing, 2010, IFPRI Discussion Paper 975

<sup>1</sup> A review of empirical evidence on gender differences in nonland agricultural inputs, technology, and services in developing countries. 2010. Peterman, Amber; Behrman, Julia; Quesumbing, Agnes. IFPRI Discussion Paper 975. Washington, D.C. International Food Policy Research Institute (IFPRI)

#### **4. Rethinking curricula in agriculture and in human nutrition**

To intertwine nutrition and agriculture, it will help to have professionals who have an appreciation for both, even if they only have expertise in one or the other. There are very few analyses of university curricula for human nutrition or for agriculture. The most recent study I could find in nutrition was a survey in Norway of what prospective employers were looking for from Norwegian trained nutritionists<sup>2</sup>. When 91 potential employers were asked about the essential functions they are looking for from a nutritionist, the second ranked out of 31 attributes was an ability to provide nutrition information to those outside of the nutrition profession (the first was familiarity with laws and regulations pertaining to nutrition). The third ranked was an ability to transform science based knowledge into practical advice and the fourth was communication with the mass media. If we had nutrition curricula that delivered this, they would go a long way to facilitating cross-sector working. In agriculture, the most recent paper I could find was by Moore et al. 2009<sup>3</sup> which cites a study from 2003 which found that only 5% of agricultural undergraduate students in the US earned a passing score when quizzed about international agricultural issues. It would be interesting to do similar quizzes about nutrition. So on the employer side and the student side we have thin evidence bases, but what we have shows some demand for nutritionists (in Norway at least) who can think outside of the nutrition box and that agriculture students in the US will not learn about international agriculture unless it forms part of their core curriculum. I could not find any content analysis studies of nutrition or agricultural curricula. If you know of some, please contact me (l.haddad@ids.ac.uk).

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<sup>2</sup> Torheim, L. E. et. al. 2009. A survey among potential employers for developing a curriculum in public health nutrition. *Public Health Nutrition* 12(80): 1039-1045.

<sup>3</sup> Moore et. al. 2009. Developing and International Agricultural Leadership Program to meet the needs of a global community. *J of Leadership Education* 8(1): 118-128.