



## Breakout Session F2.2. **Foresight Guiding Research and Innovation at Global Level – Speaker Briefing Paper**

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### **Context – the problems being addressed**

The central question posed for this Breakout Sub-Session is “*What role smallholder farmers now play and could play in meeting the future needs in food and nutrition security, poverty alleviation and sustainable management of natural resources?*” Elaborating on this, more specific questions are raised about how to bring together the needed diversity; inform stakeholders of consequences, scenarios, winners and losers; complement qualitative with quantitative arguments; help decision-makers; orient R4D; and develop foresight actions focused on the needs of the poor. A Forward Thinking Platform is proposed to address these questions on a continuing basis through the GCARD mechanism.

The Briefing Paper also flags considerations from GCARD1 to inform our GCARD2 deliberations on some pivotal issues, such as past emphasis on raising global production, perhaps at the expense of attention to smallholder dynamics; and the consequences of climate change and ecosystem degradation on smallholders.

This Briefing Paper addresses a possible path for addressing GCARD1’s question through the Forward Thinking Platform mechanism in the context of the framing questions above.

### **Current activities presented and discussed in the Session**

There is justification for the implication raised by GCARD1 that past emphasis on global production growth might need to be rebalanced with greater emphasis on smallholder needs and priorities. While it is still valid that increases in global productivity drive down food prices for the poor, if that goal is pursued without consideration for its consequences for smallholder producers, adverse outcomes can result that are counter to the missions of international R4D agencies to end poverty, hunger, malnutrition and environmental degradation.

These could include the economic marginalization of smallholders, who are ill-equipped to compete with large-scale producers unless their institutions, collective action mechanisms and production practices are fundamentally changed to involve smallholders in such macro-scale production operations. Such a retooling would require considerable consultation, foresight, investment and time. A retooling scenario should be carefully scrutinized for its consequences before proceeding. One issue to consider is whether a retooling that encourages smallholders to produce low-profit staple crops in order to contribute to global production growth targets (as opposed to home and local consumption) might constrain their ability to escape poverty, due to the low net income typically earned from such crops grown on small land areas, and the steep competition they would face from larger-scale farmers. Another is that it could increase pressures for environmental degradation, since the costs of preservation of biodiversity and soils would be a drag on profitability.

An alternative scenario that could be considered is the cultivation of high-value crops and livestock. Such a scenario might take greater advantage of the local knowledge and skills of smallholders that are difficult for large-scale producers to match. This could create a stronger competitive positioning for smallholders thus enhancing their incomes for the long term. Such a scenario might also be more likely to conserve agro-biodiversity and soils due to crop species complexity.

In our experiences in the dryland tropics this second scenario appears more promising. Farmers grow staple crops mainly to feed their households. They sell their surplus, if any on an opportunistic basis as a second priority. Their transition towards stronger market orientation is often initiated through the introduction of higher-value varieties of these staple food crops, but larger returns can be earned through diversification into additional higher value species. In this transition, careful attention to risk management and safety nets is required.

<b>Intended outcomes</b>
<p>To follow up on this issue flagged by GCARD1, we would propose that one outcome of this Breakout Session be to recommend in-depth analysis of the scenarios described above by the Forward Thinking Platform. Such a recommendation could take the approximate form (for discussion).</p> <p>Breakout Group F2.2 recommends that the Forward Thinking Platform closely examine the question of whether the welfare of poor smallholders is optimally advanced by emphasizing global production targets of low-profit staple crop commodities, versus a rebalancing of emphasis and investment to also include the production of diverse higher-value crops and livestock.</p>
<b>Commitments to collective actions in 2012-2014 (national, regional or international)</b>
<b>i. With existing resources</b>
<p>International R4D organizations in partnership with other relevant partners will continue to conduct research to gain insights on the above issue, but priority indications from influential platforms such as GCARD2 would help to foster increased priority and support for this activity.</p>
<b>ii. With additional support</b>
<p>Clear indications of the priority of this foresight question from GCARD2 would be an important immediate need. Following that, the first activity would be to gather and analyze existing evidence concerning this question. This could take the form of a white paper and subsequent scientific publications on the issue.</p> <p>A wide range of sources would need to be collected and analysed in order to draw global lessons since profitability will vary across locations, crops, ecosystems, cultures and other factors. Sufficient time should be allowed for a thorough and credible analysis assigned to a distinguished scholar. Such an analysis could become a foundation think-piece with due credit given to its initiation by GCARD.</p>
<b>iii. With specific large scale programme investment</b>
<p>Global R4D studies of existing situations that bear the features of the two alternate scenarios described above would be implemented in different regions and agro-ecosystems in order to elicit prevailing global lessons. Based on those lessons it is likely that further important questions will emerge and those questions could be addressed through experimental research. When these initiatives have generated sufficient knowledge to yield lessons about desirable scenarios and their features, pilot scale interventions could be launched that implement those lessons, with careful monitoring and assessment and flexibility for mid-course corrections should those be needed.</p> <p>Some important R4D questions to be addressed include the relative income-earning potential of these alternative scenarios (and perhaps others that might be envisioned), the relative share of such income captured by smallholders versus other actors, smallholder comparative advantages/disadvantages in sustaining a competitive positioning in these scenarios, and how these parameters might be altered in</p>

favour of smallholders in the future through R4D innovations. The impacts on land, labour, livelihoods, farmer and farm family well-being, resilience, risk and sustainability of alternative scenarios should be investigated. Questions about scales of investment and enabling infrastructure and policies required to achieve desirable scenarios should be assessed, as well as the related question of the scalability of R4D findings from local to global. The impacts of alternative scenarios on the environment should be explored. Inter-generational effects, e.g. the effects of alternative scenarios on the future prospects of today's poor rural children should also receive in-depth consideration.