

Discussion Brief: Sustainable Agricultural Productivity Target

Links to Sustainable Development Goals (SDGs) / Post-2015 Development Framework and Role of Committee on World Food Security (CFS) & Its Stakeholders

October 2013

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Summary: This discussion brief lays out the rationale for a sustainable agricultural productivity target, situates it within the Post-2015 Development Framework and proposes illustrative indicators to measure it – both as applicable to developing countries: focused on small-holder farmers in the poorest regions to achieve our ambitious poverty and hunger goals; and to developed countries.

Sustainable Agricultural Productivity and SDGs/Post 2015: The UN Secretary General's High Level Panel Report and the Sustainable Development Solutions Network Recommendations, building on the Rio Summit – key guiding documents for the **SDG/Post-2015 Framework processes – recommend that eradicating poverty and hunger by 2030 be central goals** after the 2015 deadline of the Millennium Development Goals (MDGs).

We cannot achieve either without focusing on raising small-holder agricultural productivity. Most of the world's poor live in rural areas and depend on agriculture for their livelihoods. Most of the world's hungry also live in rural areas and many of them are – tragically and ironically so – farmers. The Asian experience clearly shows that agricultural growth and productivity increases are the drivers of inclusive growth that reduce poverty faster than in any other sector.

Given environmental pressures, it is also clear that we cannot afford to increase agricultural productivity, without doing so sustainably: we need to limit the impact of agriculture on the planet and pursue sustainable intensification/climate smart agriculture.¹ Moreover, the universality of the SDGs, in that they apply to both developed and developing countries, makes the case of

Action Box: As CFS stakeholders we need to build on our efforts to promote sustainable agricultural productivity and nutrition targets, in the SDG/Post-2015 Development Framework. Without effective targets and indicators, we risk the exclusion of these important issues, as happened with the Millennium Development Goals (MDGs).

Here are some concrete actions we can consider as CFS stakeholders:

-Call on the Rome Based Agencies to explore links between small-holder productivity and investments, building on the HLPE report on small-holder investments

-Convene an informal stakeholder meeting to discuss key targets around agriculture and nutrition and why they are critical to achieve emerging hunger and poverty goals

-Engage with the Post-2015/SDG Process led by the UN Secretary General, and inform the Open Working Group's discussion around on agriculture and nutrition issues, in partnership with FAO and WFP as UN Agency leads on Food Security.

This work would be coordinated with existing processes, but the Committee and its stakeholders need to provide inputs on agriculture, nutrition and food security – as core mandate issues of the CFS - as we did in the run-up to the Madrid Consultation and around the 40th Plenary with its focus on Post-2015.

increasing agricultural productivity sustainably even more vital: developed country agriculture may need to pursue mitigation activities, while developing country farmers need to engage in adaptation – through various farming practices – to reduce their ecological footprint and get more carbon from the atmosphere in the soil.

There is very little disagreement among experts and policy-makers on the need for a sustainable agricultural productivity target.ⁱⁱ Not only is this reflected in the two documents mentioned above, but pronouncements from regional groupings like African Union – with the Maputo Declaration – to expert bodies like the recent International Food Security Conference in Netherlands, convened by the reputed journal, Global Food Security, to publications like the World Development Report; not to mention the pronouncements of the CFS and its own proceedings/reports, the High Level Panel of Experts (HLPE) report on small-holder investments this year being a case in point.

It is the role of CFS stakeholders, given the Committee’s mandate as the premier norm-setting body on food security issues, to inform the agricultural, nutrition and hunger related discussions of the Post-2015 Development Framework/SDG process. It is critical to define specific targets and underlying indicators for each area, since without credible indicators and metrics we will fail to measure progress and target resources and efforts where there is most need.

The Action Box lists some key items that we can address immediately or in the short-run to ensure that food security remains at the fore-front of the international development agenda, particularly in the realm of agriculture and nutrition. This note attempts to start that discussion. It attempts to build on the discussion started by CFS stake-holders in their informal session to inform the Madrid Consultation and continue the momentum onto the General Assembly’s final deliberations around the SDGs.

Sustainable Agricultural Productivity- measures and indicators: At the broadest level, **sustainable agricultural productivity is hard to argue with – it addresses critical needs for both human development and sustainable development.** When one calls for a sustainable agricultural development target, one calls for agricultural production to increase to meet the dietary needs of the human race without inflicting any harm on the environment.

Where there is disagreement however, is with regards to the question: how does one measure sustainable agricultural productivity? What are the areas that one would focus on? What areas would one not focus on? What are the reasons informing this decision? These questions are not new; they have been asked by agricultural economists, statisticians and agronomists for decades. What is new however is that we now have advances in technological developments, combined with the renewed political commitment to address the issues of agricultural development and measuring progress in the sector.

How technology changes the way we answer age-old problems of agriculture: For instance, today some countries in sub-Saharan Africa have digital soil maps that can be used to target specific interventions, like non-tillage agriculture, boosting yield by a factor or two without the environmental consequences of tilling; this would not have been possible without the advent of ICT technology. In some South Asian regions, we witness the use of digital videos, led by small-holder rural women farmers, to catalyze extension practices. We need to use similar innovations to measure sustainable agricultural productivity.

It is important to lay out certain principles guiding the measurement exercise of the sustainable agricultural productivity target: it needs to be simple and geared toward solving critical issues, like hunger, poverty, malnutrition, environmental degradation (it is not an end in itself); it needs to be simple, realistic but ambitious and the indicators need to make room for both developed and developing countries, allowing for varying contexts yet maintaining some level of cross-national comparison to judge relative progress. These principles applied to the SDGs and their constituent targets and indicators. An additional principle ought to be that we need to engage all stakeholders – not only public agencies, but also civil society and private sector, and farmers groups to get data that is useful; again, technological developments of the past few years can help us go a long way here.

Based on these principles and the intent of using a sustainable agricultural productivity target to help achieve key issues emerging in SDGs, we propose the following areas be measured:

- Sustainable productivity at the farm-level. This area is critical for both developed and developing country farmers, albeit with different considerations. A useful start may be to measure agricultural productivity, using Total Factor Productivity (TFP) as an indicator and supplementing it with metrics of sustainability like soil organic matter – getting carbon from the atmosphere back to the soil to produce food: what agriculture actually does. Some other sustainability indicators may be reducing deforestation to zero or reducing greenhouse-gas emissions from agriculture by some percentage by 2030. Increasing productivity can help reduce poverty and hunger in rural farming households, and doing so sustainably can help everyone.
- Enabling market conditions. This area is critical for developing countries, particularly in Sub-Saharan Africa and South Asia where farm connectivity to markets is low, resulting in farmers not benefiting from getting the right prices of their produce. Market access can be measured by using proxies like rural infrastructure or time from farm-gate to nearest dealer. We can collect such data using satellites for road networks. Getting the right prices at the right time for farm output can contribute to drastic reductions in poverty in developing countries, particularly those that have the largest concentrations of poverty.
- Rural growth and jobs. This area again is critical for developing countries. Rural labor productivity must converge with non-rural labor productivity – in an apt manner - to help generate productive rural jobs and inclusive growth. In most developed countries labor productivity gap between urban and rural areas is very low (if any), while in the poorest countries this gap is high. We need to monitor labor productivity gaps between rural and urban areas to ensure inclusive growth.

These are illustrative areas that one can measure to get a dashboard of indicators, much like we have for poverty and hunger to quantify a sustainable agricultural productivity target. CFS Stakeholders need to sustain the momentum on getting a target in the SDG/Post-2015 Processes, while also ensuring that technical experts – both within and outside the HLPE, including within the Rome Based Agencies – can develop the right set of indicators; a set large enough to reflect the complexity at hand, but selective enough to create a credible and concrete target. This is a complex task, but is needed to help us solve the problem of hunger, nutrition, poverty and sustainability, by starting with food – the necessary condition for tackling many of these issues; as the ecologist Charles Godray put it: ‘if we fail on food, we fail on everything.’

Table A: MDG 1 – Goal, Target and Indicators - Actual

Goal: Eradicate Extreme Hunger and Poverty		
Target a	<i>Halve, between 1990 and 2015, the proportion of people whose income is less than \$1.25 a day</i>	
	Indicators for target 'a' (and monitoring agency)	a.i Proportion of population below \$1.25 per day (World Bank)
		a.ii Poverty gap ration (World Bank)
		a.iii Share of poorest quintile in national consumption (World Bank)
Target b		
	<i>Halve, between 1990 and 2015, the proportion of people who suffer from hunger</i>	
	Indicators for target 'b' (and monitoring agency)	b.i Prevalence of underweight children under five years of age (WHO-UNICEF)
		b.ii Proportion of people below minimum dietary energy consumption (FAO)

Table B: SDG on Hunger/Food Security and Nutrition/Poverty – Goal, Target and Indicators – Illustrative
[One could have different goals for hunger/poverty/agriculture and nutrition, or they could be combined. The point here is to reflect what underlying targets and indicators could look like; these are illustrative much in the vein of the High Level Panel and SDSN reports; the table highlights sustainable agricultural productivity target, but also lists out an illustrative poverty target to show how universal applicability of SDGs may warrant varying targets, particularly for developed and developing countries]

Goal: Eradicate Extreme Hunger and Poverty by 2030 (by promoting food security and nutrition)		
Target u- Poverty	<i>Eradicate Extreme Poverty by 2030 and Decrease Inequality</i>	
		w.1 Extreme poverty rate (population living below \$1.25) down to 3% in developing countries
		w.2. Poverty rate (population living below \$2) down by x% in developing countries
		w.3: Poverty rate down by y% of national poverty line in developed countries
		w.4: Share of poorest quartile in national consumption for all countries
Target x- Sustainable Ag Productivity		
	<i>Increase agricultural productivity sustainably by x percent from 2015 to 2030</i>	
	Indicators for target 'x' (monitoring agency TBD)	x.1 Increase TFP growth by y% globally, (disaggregate by region)), closing yield gaps
		x.2 Increase rural labor productivity by r% (disaggregate by region)
		x.3 Reduce the ecological footprint of agriculture – greenhouse gas emissions reduction/slow the rate of deforestation to zero by 2030/get more carbon from atmosphere to soil – increase soil organic content (disaggregate by region and country)
		x.4: Increase market access physically and electronically by xx% (disaggregate by region and country)

Annex I

CLARIFYING TERMS - GOALS, TARGETS AND INDICATORS

The terms ‘goal’, ‘target’ and ‘indicators’ have specific connotations in the MDGs.¹ Subsequent goal-setting exercises, such as the Rio Summit and associated Sustainable Development Goals (SDGs) and the UN Secretary General’s High Level Panel of Experts on the Post-2015 Development Framework and the Sustainable Development Solutions Network informing SDGs, have maintained the distinction among these terms.

A ‘goal’ is the broadest objective, largely aspirational, which is usually disaggregated into specific ‘targets’ that are time-bound and measurable. Indicators are the actual measures, which are usually assigned to a particular International Governmental Organization (IGO) to monitor. The example of MDG One provides a clear example here. The goal was to ‘eradicate extreme hunger and poverty’; the specific targets associated with these goals were: a) ‘halve, between 1990 and 2015, the proportion of people living in extreme poverty and b) extreme hunger’. There were a series of indicators monitoring progress on these targets, which are the purview of IGOs like the World Bank, WHO and FAO (depending on their mandate and expertise).

Table 1.1: MDG 1 – Goal, Target and Indicators - Actual

Goal: Eradicate Extreme Hunger and Poverty		
Target a	<i>Halve, between 1990 and 2015, the proportion of people whose income is less than \$1.25 a day</i>	
	Indicators for target ‘a’ (and monitoring agency)	a.i Proportion of population below \$1.25 per day (World Bank)
		a.ii Poverty gap ration (World Bank)
		a.iii Share of poorest quintile in national consumption (World Bank)
Target b	<i>Halve, between 1990 and 2015, the proportion of people who suffer from hunger</i>	
	Indicators for target ‘b’ (and monitoring agency)	b.i Prevalence of underweight children under five years of age (WHO-UNICEF)
		b.ii Proportion of people below minimum dietary energy consumption (FAO)

This note is for discussions informing the Post-2015 Development Framework/Sustainable Development Goals agenda around CFS 41, among CFS stakeholders.

Endnotes

ⁱ We note that while we focus on sustainable productivity here, we are cognizant of access, utilization and stabilization components of food security, as well as links to nutrition. However, we deliberately focus on one aspect of the food security issue, since it tends to get neglected, as we saw in the MDGs which have no mention of agriculture and yet had goals related to poverty and hunger reduction.

ⁱⁱ The need to focus on small-holder farmers and their productivity is not without controversy. The overwhelming evidence from Asian experience, where small-holders tend to be more productive than their larger counterparts--and catalyzed economic growth and inclusive economic transformation--still needs verification in Africa. But recent successes in raising productivity on small-holder farms in Africa are showing similar broad-based, multiplier effects.

¹ United Nations, ‘UN Millennium Statistics’ available at:
<http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/OfficialList.htm>