



**39<sup>th</sup> Meeting of the Expert Panel on Social, Environmental and Economic Performance (SEEP) of Cotton Production**  
**18 March 2014**  
**Bremen - Germany**

**15:30 hs (German time) Bremen Cotton Conference**

**Members Present:** Allan Williams (Chair), Francesca Mancini (Vice-Chair), Elke Hortmeyer, Jens Soth, Denilson Galbero Guedes, Leon Picon, Bill Norman, Kater Hake. Jose Sette and Alejandro Plastina served as Secretariat from ICAC.

**Observers:** Neal Gillen (USA), Suresh Kotak (India), Ed Barnes(USA).

**Agenda**

1. Finalizing the indicators report
2. Testing the indicators framework
3. Future role for SEEP
4. Next meeting of SEEP

1. Finalizing the indicators report

Allan and Francesca will undertake a final round of revision of the indicators report on March 24-25, 2014. In particular, Chapter 4 will undergo substantial re-writing and content will be added. The last chapters on methodology will be restructured and the fact sheets will be shortened. The final version will be sent for English editing at FAO. It was agreed that only “red flags” will be addressed in this last revision.

Most members of SEEP chose to receive a copy of the final report after English editing. Dr. Kater Hake and Mr. Denilson Galbero Guedes chose to receive a copy of the final report at the same time it was sent for language editing.

2. Testing the indicators framework

There was consensus about the list of issues that needed to be addressed in order to operationalize the indicators framework:

- Can the 68 indicators be reduced or refined?
- Account for national perspectives
- What data is already available in each country? How comparable are they?
- How can this information can be used to help farmers to increase their productivity, profitability and sustainability?

SEEP agreed to ask the next Plenary Meeting for guidance regarding the possibility of testing the indicators framework. The Zambian Cotton Board along with GIZ, and Mozambique have expressed a strong interest testing the indicators framework. Australia and Brazil have also indicated an interest, as have Paraguay and Peru through FAO, and initial discussions have also been held with the BCI.

A recommendation to test the indicators will be included in the text of the report.

Jens distributed a classification of indicators resulting from the World Café in Colombia (attached).

### 3. Future role for SEEP

There was agreement among Members and Observers that SEEP contributes valuable objective information to ICAC, and serves the world cotton community well by focusing on sustainability issues with a neutral, scientific-based approach.

SEEP could serve as a clearinghouse of information to test the indicators in different countries with central coordination. Such a project would take a minimum of two years and will require funding. A south-south cooperation project to test the framework in South American and Sub-Saharan African countries sponsored with funds from the WTO settlement in the Brazilian challenge to the US might be explored.

There was consensus that promotion of SEEP findings could be improved. However, SEEP is a scientific-based and neutral body and should not turn into an advocacy group. Suggested alternatives include: issuing a 2-page press release in the 5 official languages of ICAC, doing some fact news, talking with media people to pick up the facts, asking the Standing Committee Members and the Private Sector Advisory Panel how to communicate the facts best. A central question, given that Fortune 500 companies report on sustainability parameters on every aspect of their operations, is how to elevate the information in SEEP to mainstream cotton users.

### 4. Next meeting of SEEP

The next meeting will take place in Thessaloniki during the 73<sup>rd</sup> Plenary Meeting of the ICAC.

**Results of the World Café session of  
the 72<sup>nd</sup> ICAC Plenary Meeting  
October 01 -02 , 2013,  
Cartagena, Colombia**

**Discussion of the  
Metrics of sustainability  
and the  
corresponding indicator set**

**Jens Soth, HELVETAS Swiss Intercooperation,  
Zurich Switzerland**

**October 09, 2013**

**With support from**

**Uwe Grewer, FAO Rome, Italy**

**Matthias Knappe, ITC, Geneva, Switzerland**

## **1. Results of the 1<sup>st</sup> round of the World Café on October 01**

### **Discussion of the metrics for sustainability**

Based on the SEEP report regarding metrics for sustainability the more than 160 participants discussed potential implementation approaches for the proposed indicators framework at 19 so called World Café tables in the 5 official ICAC languages on October 01.

Most of the discussion groups were agreeing on the following three aspects:

1. The measurement framework needs country-specific implementation structures. Seen with international perspective, the cotton sector is too heterogeneous to allow the same model to be rolled out in all cotton producing countries.
2. The implementation of the framework should not lead to any discrimination of any country or region within the cotton sector.
3. An idea that was developed by several group tables was to establish a national multi-stakeholder consultation board that is jointly defining the implementation steps and also determines the roles of different national value chain actors in order to share the responsibilities of data collection.

Not unexpected for such a multi-faceted issue like measuring sustainability, there were also controversial issues listed by table reporters:

- Should the data collection be voluntarily or compulsory
- should it work via self assessments or via third data assessments
- Does it aim to better compare cotton with other fibres or rather to compare different cottons within the sector internally;
- How far shall the data be internal or external ?  
Internal or external data ?  
Use of data ? E.g. promotion potential, approved buyers' lists, internal progress
- Weighting of indicators towards each other ?
- Shall the numbers of indicators be reduced further `?

The groups came with creative and substantial suggestion, what measures could be taken to prepare the implementation of measurement of indicators:

- Conduct pilot studies to test out the feasibility of each indicator
- Compile an inventory of already existing national and local data gathering schemes in order to search for synergies
- Develop capacity building schemes for people that are assigned for data collection (eg as mandated by the national boards as mentioned in suggestion 3)
- Develop a scheme that allows to learn from the data aiming at improvements of the production.

## **2. Results of the 2<sup>nd</sup> round of the World Café on October 02**

### **Individual indicator discussion**

As second world café round, conducted in the forenoon of October 02, gave the discussion group the task to check the indicator set for potential candidates that should be left out or to identify indicators that were missing. 15 discussion tables and more than 130 participants worked hard to go through the entire

list of indicators. Additional to the indicator selection concrete suggestions were made to re-formulate individual indicators aiming to enhance their comprehensibility.

The following summarized table gives an idea about the quantitative evaluation of indicators listed or “de-listed” by the discussion groups. Any positive mentioning was valued by a “1” and any de-listing valued as “-1”. This is not meant to be a representative assessment, but an indication how the “collective cotton expertise” of ICAC participants thinks about the indicators.

All indicators that reached a total score of “2” and more are marked in green, thereby suggesting an indicator that is seen as relevant.

All Indicators that reached a total score of “-2” and less are marked in orange, thereby suggesting an indicator that might be a candidate for being omitted in streamlined versions of the indicator set.

Table 1: Summarized results from the indicator discussion

		TOTAL SCORE
<b>1. Pest and Pesticide Management</b>		
1.1	Quantity of active ingredients of pesticides used (Kg/ha)	2
1.2	Quantity of active ingredients of highly hazardous pesticides used (Kg/ha)	-1
1.3	Number of pesticide applications per season	0
1.4	% of treatments that involve specific measures to minimize non target application and damage	1
1.5	Existence of a time-bound IPM plan	-2
1.6	% of cotton area under IPM	2
1.7	% of farmers that use only pesticides that are nationally registered for use on cotton	-1
1.8	% of farmers that use pesticides labelled according to national standards, in at least one national language	-2
1.9	% of farmers that use proper disposal methods for pesticide containers and contaminated materials including discarded pesticide application equipment	2
1.10	% of farmers following recommended practices for pesticide mixing, application and cleaning of application equipment	0
1.11	% of farmers with dedicated storage facilities that keep pesticides safely and out of reach by children	0
1.12	Total number and % of cotton area involving vulnerable persons applying pesticides	-2
1.13	% of workers applying pesticides that have received training in handling and use	-1
1.14	% of farmers having access to and using adequate protective equipment (by type)	3
<b>2. Water Management</b>		
2.1	Quantity of water used for irrigation (m3/ha)	1
2.2	Irrigation use efficiency (%)	1
2.3	Crop Water Use Productivity (m3 of water per ton of cotton lint)	4
2.4	% of area under water conservation practices	1
2.5	Groundwater table level (m from the surface)	0
2.6	Salinity of soil and irrigation water (deciSiemens (dS) per metre, EC)	3
2.7	Quality of discharge water (various)	-5
<b>3. Soil Management</b>		
3.1	Soil characteristics: organic matter content, pH, N, P, K	0
3.2	Use of soil sampling for N, P, K (% of farmers)	1
3.3	Fertilizer used by type (kg/ha)	2
3.4	% of area under soil erosion control and minimum / conservation tillage practices	2

#### 4. Land Use and Biodiversity

4.1	Average yield (ton of cotton lint/ha)	0
4.2	Total area (ha) and % of natural vegetation converted for cotton production (in ha)	2
4.3	% of total farm area that is non-cropped	-2
4.4	Average number of cotton and other crops per 5-year period	1

#### 5. Climate Change

5.1	GHGs emissions and carbon sequestration per MT of cotton lint and / or ha (in CO2-e)	0
5.2	On-farm energy use per MT of cotton lint and / or ha (GJ)	1

#### 6. Economic Viability, Poverty reduction and Food Security

6.1	Average annual net income from cotton production	0
6.2	Price received per ton of cotton lint at farm gate	-1
6.3	Returns above variable costs per hectare and t of cotton lint	-2
6.4	Return on investment	-2
6.5	Debt to asset ratio	-2
6.6	Number and % of household members living below the national poverty line	0
6.7	% of farmers/workers with access to productive resources	-3
6.8	Average value of assets per producer household	-2
6.9	% of producing households with a specific asset	-2
6.10	Perception of change in economic situation over last five years (% of farmers)	0
6.11	Total number and % of cotton farming household members with kilojoule intake below the international norm	-2
6.12	Number of days with food deficiency per annum in cotton producing households	-2

#### 7. Economic risk management

7.1	Cotton yield volatility	1
7.2	Farm gate cotton price volatility	2
7.3	% of farmers with measures in place to manage price risks by type	-1
7.4	% of total household income that the largest income source represents	0
7.5	Average number of days after sale that farmers receive payment	-1
7.6	% of farmers with access to equitable credit	1
7.7	% of farmers showing understanding of the factors involved in price formation or have daily access to international and domestic prices	1

#### 8. Labor rights and standards

8.1	% of children attending and completing appropriate level of school (by gender)	2
8.2	% of farmers/workers with effective access to health care facilities	0
8.3	% of farmers/workers with access to potable water	0
8.4	% of farmers/workers with access to sanitation facilities	1
8.5	Number of child labourers (by age and gender)	3
8.6	% of workers with an enforceable employment contract (by age and gender)	0
8.7	% of workers who are paid a minimum or living wage and who always receive their full wage in time (by age and gender)	0
8.8	Total number and % of workers being subordinated by forced labor	1
8.9	% of active cotton farmers and workers contributing to a pension scheme and / or eligible to receive a pension	-2
8.10	% of cotton farming households benefitting from income support in case of officially recognised extreme income shocks	-1
8.11	% of employed women that have the right to maternity leave and receive payments	2

#### 9. Worker health and safety

9.1	Annual nonfatal incidences on cotton farms (total, % of workforce by age, gender)	0
-----	---	---

9.2	Total number of fatalities on cotton farms per year	2
-----	---	---

### 10. Equity and Gender

10.1	% of leadership roles held by women in a producers' or workers' group	2
10.2	Gender and age wage differentials for the same quantity of produce or same type of work	1
10.3	% of women whose income from independent sources has increased / decreased	0

### 11. Farmers' Organizations

11.1	Numbers of farmers, workers who have attended training (by training type, age and sex)	2
11.2	Number of farmers and workers participating in democratic organizations (by age, gender)	0

### 3. Indicators suggested by the group

Several groups suggested the following indicators additionally – thus it seems that the criterion or topic is of relevance to the group:

- For the criteria group 5 *climate change*:  
Changes in rainfall patterns eg normal and above or below average
- For the criteria group 6 *economics*:  
Degree of mechanization
- For the criteria group 7: *economic risk management*  
Access to market, market information OR information in general

Furthermore the following ideas for further indicators were coming up, but only once and sometimes without assignment to a criteria group (though this might be obvious)

Investment into R & D  
Pesticide related fatalities  
Pesticide – try to find combined quantitative and toxicity indicator  
Structural change via: size of cotton farms, No of workers / ha, mechanization  
Knowledge regarding spraying equipment and spray  
Knowledge regarding avoidance of pest / org pest to farmers  
% de agricultures con seguros agropecuarios  
Use of meteorologic data  
% of farmers using "pirated" technology  
Level of value addition  
Management of herbicide and pesticide resistance  
Number of bird species  
Net parameter , rainfall, normal, above/below  
% of farmers able to decide about area under cotton themselves  
% of female workers paid different than male  
% of farmers applying technologies received in training