

FAB14 – 14th Annual International Fab Lab Conference  
Toulouse, France, 16-22 July 2018

## Report on the Workshop Fab Labs and Sustainable Development Goals



Workgroup Fab labs and SDGs: Pieter van der Hijden (The Netherlands & Suriname) plus global team: Enrico Bassi (Italy), Vaneza Caycho Ñuflo (Peru), Neville Govender (South Africa), Arundhati Jadhav (India), Yogesh Kulkarni (India), Noksy Letsoalo (South Africa), Jean-Baptiste Natali (New Zealand), Wendy Neale (New Zealand).

Facilitators during FAB14 workshop session: Pieter van der Hijden (The Netherlands, Suriname), Vaneza Caycho Ñuflo (Peru), Neville Govender (South Africa), Noksy Letsoalo (South Africa), Jean-Baptiste Natali (New Zealand), Wendy Neale (New Zealand)

Report by Pieter van der Hijden ([pvdh@sofos.nl](mailto:pvdh@sofos.nl)) - 26 July 2018

- All materials are free to download via <http://bit.ly/fab14-sdgs-kit>.
- Pictures are available via <http://bit.ly/fab14-sdgs-session-pictures>.



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## 1 Our intention

In 2015, countries of the world agreed on 17 UN Sustainable Development Goals (SDGs) to be completed by all by 2030. A local Fab Lab can use these SDG's as a frame of reference to identify what is most important for their lab and to give their work more focus. This will also support understanding, cooperation and support of fab labs by policy makers, NGO's, and sponsors.

The Workgroep "Fab Labs and SDG's" developed a workshop format with the same name to help staff and volunteers of fab labs / makerspaces / innovation centers to align their organization with the SDGs.

The content of the workshop format is:

- Explore the Sustainable Development Goals (SDGs)
- Determine the SDG-profile for your fab lab
- Plan a better match with your SDG-profile
- Identify new opportunities for the fab lab network

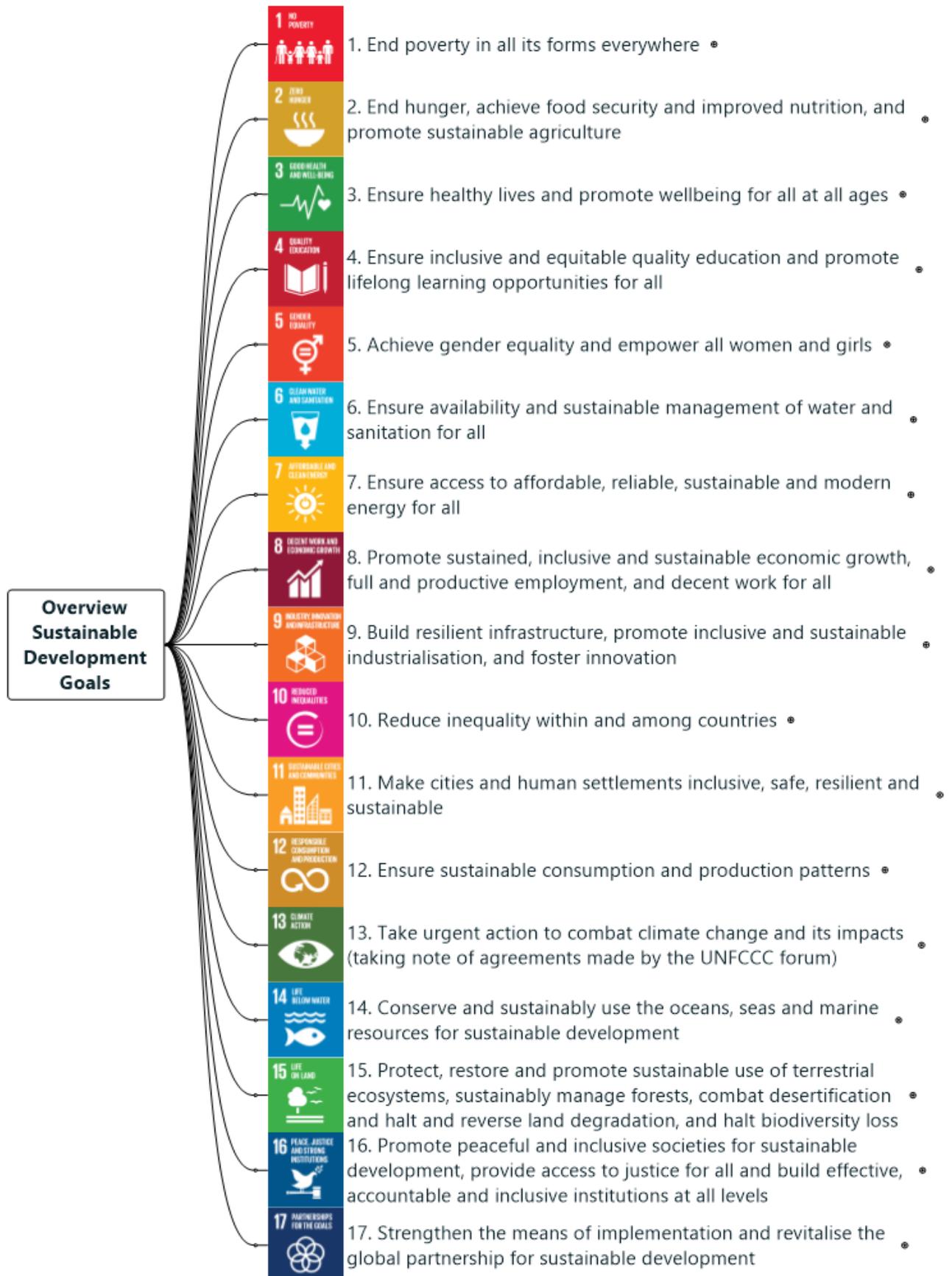
We developed the workshop format for use by management, staff and volunteers of a local lab, preferably during a 4 hour session. Nevertheless we offered it at FAB14 with a heterogeneous audience and in a condensed (2 hour) time frame.

## 2 Inputs

We had a team of 6 facilitators from various countries who could run parallel groups of participants; one group in French. The workshop attracted 24 participants from Fab Labs in 19 countries: Canada, Chile, Czech Republic, Denmark, Finland, France, Honduras, Jordan, Lebanon, Mexico, The Netherlands, New Zealand, Rwanda, South Africa, Spain, Suriname, Switzerland, Turkey, and USA. We worked with four parallel groups.

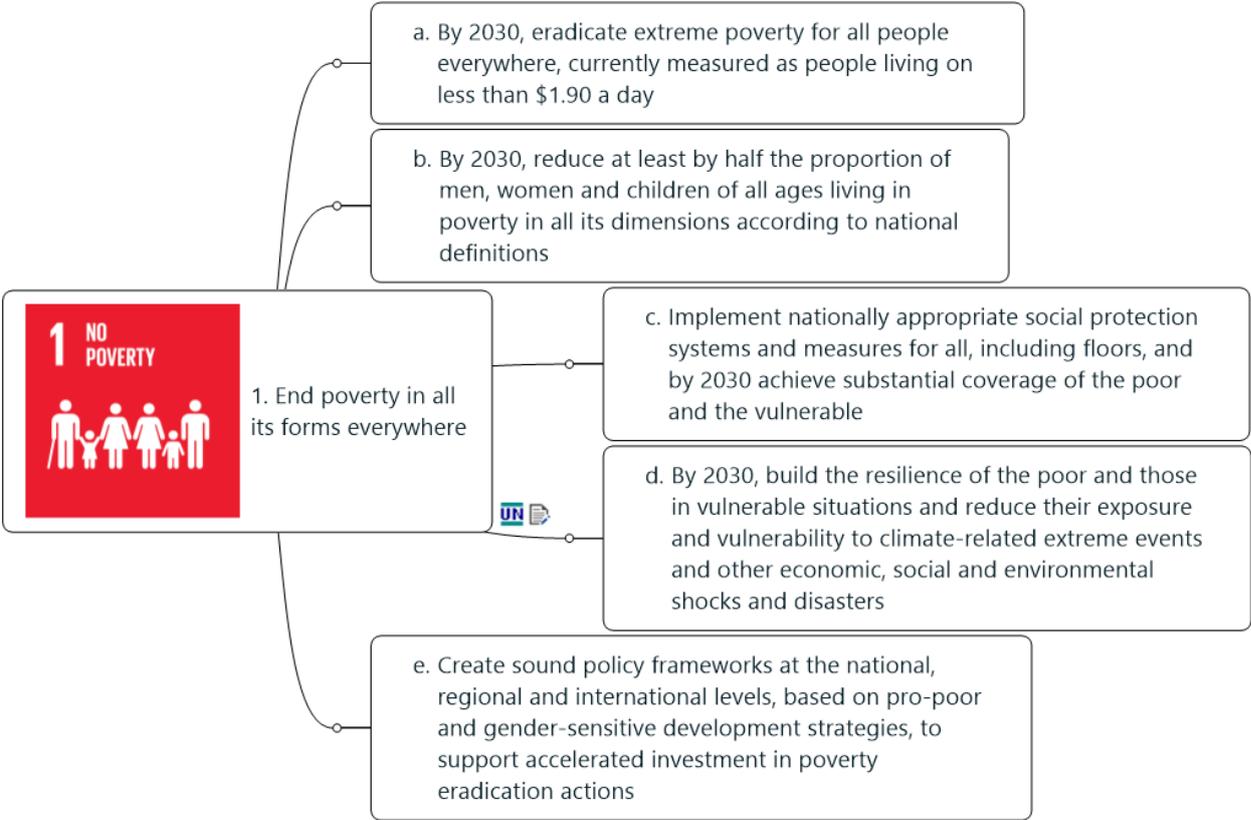
All groups followed the same time schedule and used the same materials (manual, SDG cards, SDG documentation, SDG plan board (A3), stickers and markers) and activities. We kept inter-group interaction to the minimum.

Infographic 1 shows an overview of the 17 SDGs.



Infographic 1 – Overview Sustainable Development Goals (SDGs)

The 17 Sustainable Development Goals have been subdivided into 169 targets (and 220+ indicators). Infographic 2 shows, as an example, SDG 1 (No poverty) and its 5 targets.

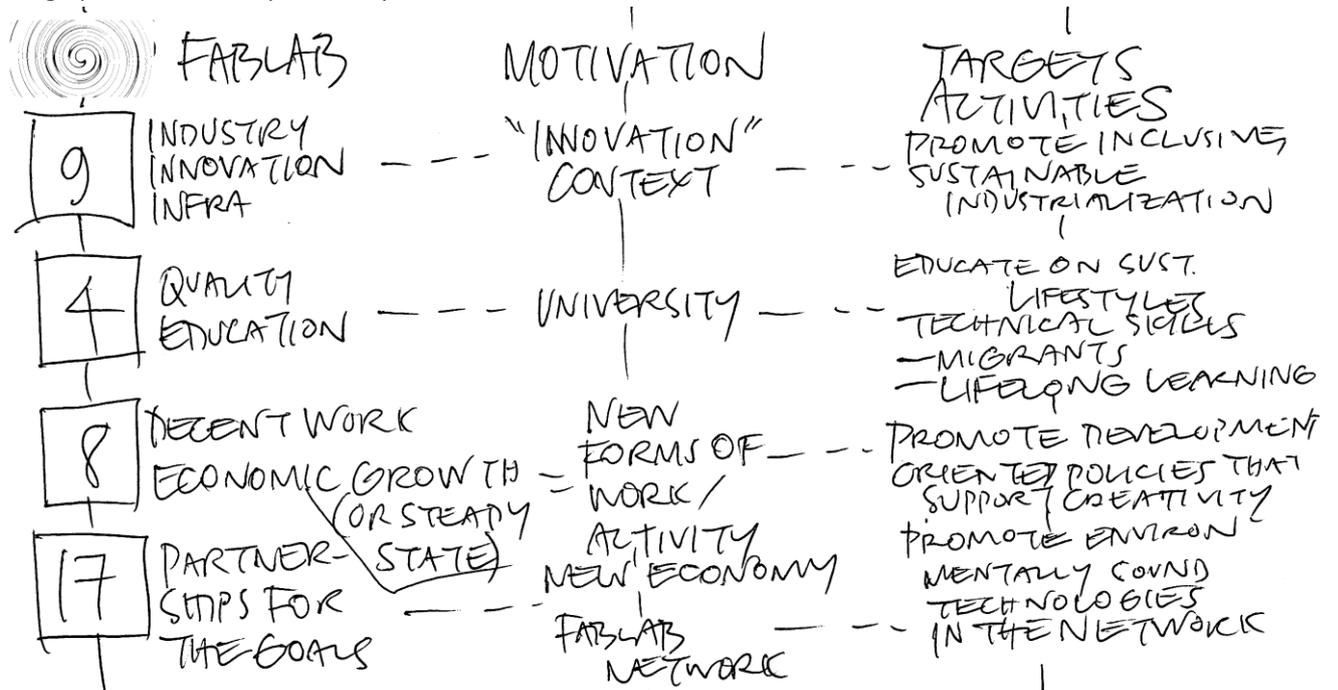


Infographic 2 – SDG 1 (No poverty) and its targets

### 3 Outputs

Almost all participants (and facilitators) produced a (preliminary) SDG profile for their fab lab consisting of 2-4 SDGs. About two in every parallel group produced a beginning of a plan board to clarify their selection of SDGs and to explore new activities to better match the underlying targets of these SDGs AND the impact on the fab lab network.

Infographic 3 shows the preliminary results for one of the fab labs.



Infographic 3 – SDG plan board for one of the fab labs

Table 1 shows the matrix of 25 (anonymous) fab labs and their SDG-profiles. Note that these results are very preliminar (hence we did not list the names of the fab labs).

FAB LAB	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Total
A				x														1
B				x													x	2
C				x								x						2
D			x	x								x						3
E				x							x	x						3
F				x								x		x				3
G				x	x							x						3
H				x				x	x									3
I				x					x		x	x						4
J				x				x	x		x							4
K				x			x			x		x						4
L							x				x	x					x	4
M				x	x					x		x						4
N				x	x										x		x	4
O				x				x	x								x	4
P			x	x											x		x	4
Q								x	x		x						x	4
R				x					x		x	x						4
S				x					x		x	x						4
T				x				x	x	x								4
U		x				x			x					x				4
V				x	x			x	x									4
W				x				x	x								x	4
X				x				x	x	x	x							5
Y	x			x	x		x	x										5
Total	1	1	2	22	5	1	3	9	12	4	8	11	0	2	2	0	7	

Table 1 - 25 Fab Lab - SDG profiles

Almost all SDGs have been covered, although their "popularity" varies greatly; "Quality education" goes on top.

Looking at the patterns in the SDG-profiles:

- Three fab labs (in Spain, France, and Canada) have the same SDG-profile: 4, 9, 11, 12. Sisters!
- Fab labs which have at least one SDG in common (in their preliminary SDG-profile) could be considered as Nieces; the rest is just "family".

## 4 Evaluation

At the end of the workshop we asked the participants to answer three questions:

1. What was good?
2. What could be better (especially when applied in local fab labs)?
3. Any other suggestions?

The participants judged almost unanimously that the workshop was a success for them. They appreciated the format and the resources, the insights acquired and the outcomes to work upon further. Some people indicated to want to redo the workshop with their team at home.

What could be improved is: smaller parallel groups and/or bigger tables, personal copies of all materials (or all resources online), more time, more moments of exchange between the parallel groups, clarifying examples to the facilitator manual and/or the projector presentation, role description of parallel group facilitator.

A suggestion was to add the SDG-profiles to a common database, preferably fablabs.io. Another one to ask every presenter at future conferences to add SDG=labels to their metadata (if appropriate).

For the workgroup the conclusion is that we are on the right track and want to proceed with our efforts.

## 5 Follow-up

- **The workgroup** will publish the materials "as is" ASAP (see frontpage). Then it will finetune the materials, e.g. provide an example to every step, provide interactive online documentation on the SDGs (to avoid a lot of photocopying), personal plan board (A3) and common plan board (A0).
- **The workgroup will ask participants and all other fab labs** to run the workshop in their local fab labs and organize sessions at home with their management, staff and volunteers, preferably 4 hours in length (instead of 2). Please inform the workgroup on your progress.
- **The workgroup** will compose a temporary list or map of fab lab sdg-profiles. We will consult with the fablabs.io people to include the sdg-profiles in the fab lab directory.
- **Together we can**, once the list of fab lab SDG-profiles has been filled more and more, search the network for our "sisters" (fab labs with the same profile) and explore and improve all kinds of cooperation.