

OFFICIAL FEEDBACK FORM

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| DIALOGUE DATE | Wednesday, 12 May 2021 08:00 GMT +07:00 |
| DIALOGUE TITLE | Innovation Showcase for Agricultural Research-to-Market Programme |
| CONVENED BY | Dr Cait Goddard, The Borlaug Higher Education for Agricultural Research and Development (BHEARD) at Michigan State University |
| DIALOGUE EVENT PAGE | https://summitdialogues.org/dialogue/16588/ |
| DIALOGUE TYPE | Member State |
| GEOGRAPHICAL FOCUS | Cambodia |

The outcomes from a Food Systems Summit Dialogue will be of use in developing the pathway to sustainable food systems within the locality in which they take place. They will be a valuable contribution to the national pathways and also of interest to the different workstreams preparing for the Summit: the Action Tracks, Scientific Groups and Champions as well as for other Dialogues.

1. PARTICIPATION

TOTAL NUMBER OF PARTICIPANTS

120

PARTICIPATION BY AGE RANGE

0-18

40

19-30

70

31-50

10

51-65

66-80

80+

PARTICIPATION BY GENDER

86 Male

34 Female

Prefer not to say or Other

NUMBER OF PARTICIPANTS IN EACH SECTOR

40 Agriculture/crops

Fish and aquaculture

20 Livestock

Agro-forestry

Environment and ecology

Trade and commerce

40 Education

Communication

2 Food processing

Food retail, markets

Food industry

Financial Services

Health care

3 Nutrition

1 National or local government

Utilities

Industrial

14 Other

NUMBER OF PARTICIPANTS FROM EACH STAKEHOLDER GROUP

10 Small/medium enterprise/artisan

Large national business

Multi-national corporation

5 Small-scale farmer

Medium-scale farmer

Large-scale farmer

10 Local Non-Governmental Organization

20 International Non-Governmental Organization

Indigenous People

60 Science and academia

Workers and trade union

Member of Parliament

Local authority

1 Government and national institution

Regional economic community

6 United Nations

1 International financial institution

Private Foundation / Partnership / Alliance

Consumer group

6 Other

2. PRINCIPLES OF ENGAGEMENT

HOW DID YOU ORGANIZE THE DIALOGUE SO THAT THE PRINCIPLES WERE INCORPORATED, REINFORCED AND ENHANCED?

This dialogue was designed to maximise the opportunities for participants to view the presentation of business ideas using video and live streaming.

HOW DID YOUR DIALOGUE REFLECT SPECIFIC ASPECTS OF THE PRINCIPLES?

Live streaming to increase participation opportunities and to extend the time frame for viewing the dialogue. The technique worked well in attracting a large audience both during the event and in subsequent views of the dialogues, although the videos do not stimulate much online discussion they do attract a lot of views. The participants in the online event were much more engaged in discussion. These method was well suited to showcasing innovation and providing possible links between innovators and investors.

DO YOU HAVE ADVICE FOR OTHER DIALOGUE CONVENORS ABOUT APPRECIATING THE PRINCIPLES OF ENGAGEMENT?

This type of event is useful in bringing the dialogues to the attention of a wider audience and for sharing an excitement in innovation and entrepreneurship. Very effective in attracting student, academic and private sector interest and enabling international participation.

3. METHOD

The outcomes of a Dialogue are influenced by the method that is used.

DID YOU USE THE SAME METHOD AS RECOMMENDED BY THE CONVENORS REFERENCE MANUAL?

Yes

No

Presenters used pre-recorded videos to increase visual impact and showcase field operations. There were opportunities for some questions and answers although with the interest generated it was necessary to link the audience to presenters for subsequent discussion in order to cope with the interest. The curator provided video web links and email addresses for enquiries.

4. DIALOGUE FOCUS & OUTCOMES

MAJOR FOCUS

The focus of this event was on innovation in food systems, mostly in relation to agriculture but also featuring food processing and retailing.

BHEARD and the USAID Mission in Cambodia have supported the improvement of key aspects of the agricultural research system in Cambodia by investing in developing capacities in the Royal University of Agriculture, the Center of Excellence on Sustainable Agricultural Intensification and Nutrition and other institutions. Stakeholder engagement with key actors in Cambodia's agricultural system, identified that investment in technology transfer would be an important way to remove barriers to innovation and progress in Cambodian agriculture. The BHEARD funds for Cambodia were used for a competitive seed grant program to support innovative research. This small project has demonstrated the interest in innovation and the potential for turning innovations into commercializable products for continuous improvement in the agricultural sector.

Four prize winning examples were presented that demonstrate what relatively small investments, creative interest, entrepreneurial and technical skills can achieve in a short time. The examples show how much can be achieved and how necessary the investments in the institutions and ideas are for the future of the food system.

The examples provided were:

■ Safe plant spraying product to tackle pests, diseases, and nutrition
Contact details: Tho Kim Eang: thokimeang@rua.edu.kh - Tel: +855 85 999 457

■ LM-Drone: Large Scale Crop Health Monitoring by Unnamed Aerial Vehicle (Drone).
Contact details: Sanara Hor : hsanara@rua.edu.kh - Tel: +855 12 722 616

■ PhallChangrit (PCr.) innovates the cricket value chain, from the production of low-cost cricket-feed to the production of highly nutritive cricket-based products:

Contact details: Phalla Miech phallchangrit@gmail.com Tel: +855 77 743 739

■ Veggi-Transplanter: Manufacturing of easy-to-use equipment/ products that help farmers to optimize vegetable farming.

ACTION TRACKS

| | |
|-------------------------------------|--|
| <input type="checkbox"/> | Action Track 1: Ensure access to safe and nutritious food for all |
| <input checked="" type="checkbox"/> | Action Track 2: Shift to sustainable consumption patterns |
| <input checked="" type="checkbox"/> | Action Track 3: Boost nature-positive production |
| <input checked="" type="checkbox"/> | Action Track 4: Advance equitable livelihoods |
| <input type="checkbox"/> | Action Track 5: Build resilience to vulnerabilities, shocks and stress |

KEYWORDS

| | | | |
|-------------------------------------|---------------------------|--------------------------|-------------------------|
| <input type="checkbox"/> | Finance | <input type="checkbox"/> | Policy |
| <input checked="" type="checkbox"/> | Innovation | <input type="checkbox"/> | Data & Evidence |
| <input type="checkbox"/> | Human rights | <input type="checkbox"/> | Governance |
| <input checked="" type="checkbox"/> | Women & Youth Empowerment | <input type="checkbox"/> | Trade-offs |
| <input type="checkbox"/> | | <input type="checkbox"/> | Environment and Climate |

MAIN FINDINGS

Student and youth enthusiasm for the event was evident and this is a sign that support for innovative ideas are a key aspect for the sustainability of agriculture and the appeal to youth of employment in agriculture and food system. The support from both international and national institutions proved effective in stimulating innovation and entrepreneurship. Investor interest for commercial products was immediate with private sector representatives seeking contact with the innovators for follow-up discussions.

This event amply demonstrates both the interest and the capabilities of student and academic teams in pursuing innovation and also demonstrates the value of a youthful organization like Impact Hub in sustaining the effort. Given the many challenges confronting agriculture and the technology lag evident in Cambodia, it is evident that there is insufficient national investment (public and private) in incubators for innovation, in funding academic research and challenging researchers to move into commercializable research areas. Mentoring of academics and students is a critical aspect for generating commercial solutions. The experience that academics and students have gained from placements in other countries is another factor in fostering innovation, giving the researchers opportunities to see outside the box in terms of the potential for improvement of agricultural production and agribusiness.

The event demonstrates the interest and the relevance of agribusiness oriented studies featuring technological innovation and relevance of academic institutions in contributing to innovation and development and benefits to students of being exposed to these possibilities. It also amply demonstrated the value added of the organizations like Impact Hub, both for commercial possibilities and appeal to youth.

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OUTCOMES FOR EACH DISCUSSION TOPIC

GENERAL DISCUSSION

Discussion of the different innovations included the benefits of naturally derived solutions for pest control, disease resistance and fertility; the nutritional benefits of insects as human food; cost savings for insect raising; consumer interest in insect sourced food products; food processing options; use of agricultural by-products; marketing strategies: Eat Crickets, Be Healthy, Support Farmers; drones for crop health mapping, aerial survey and as a tool for consultant services; targeting for supply of different services to different markets; cost savings and productivity increases through mechanization at appropriate scale.

The appetite and interest in youth in innovation and technology was clear. The support from academia and the private sector was also clear. more work is required, connecting the national research bodies to academia and the private sector, fostering and incentivizing innovation and taking novel solutions through to realization in the marketplace.

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AREAS OF DIVERGENCE

ACTION TRACKS

- Action Track 1: Ensure access to safe and nutritious food for all
- Action Track 2: Shift to sustainable consumption patterns
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ATTACHMENTS AND RELEVANT LINKS

ATTACHMENTS

- **Opening Remarks Professor John Medendorp, Director of BHEARD**
<https://summitdialogues.org/wp-content/uploads/2021/05/John-Medendorp-Opening-Words.pdf>

RELEVANT LINKS

- **The Center for Excellence in Sustainable Agricultural Intensification and Nutrition**
<http://www.cesain.org/en>
- **Impact Hub**
<https://phnompenh.impacthub.net/>
- **BHEARD - Borlaug Higher Education for Agricultural Research and Development**
<https://www.canr.msu.edu/bheard/>
- **iGreenSynergy: Safe plant spraying product to tackle pests, diseases, and nutrition.**
<https://youtu.be/VObErMgyxBE>
- **LM-Drone: Large Scale Crop Health Monitoring by Unmanned Aerial Vehicle (Drone).**
<https://youtu.be/uAhyDZleUhQ>
- **PhallChangrit (PCr.) innovates the cricket value chain, from the production of low-cost cricket-feed to the production of highly nutritive cricket-based products:** <https://youtu.be/p5me1TaK9DI>
<https://youtu.be/p5me1TaK9DI>
- **Veggi-Transplanter: Manufacturing of easy-to-use equipment/ products that help farmers to optimize vegetable farming.**
<https://youtu.be/SSGCOshECLw>
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