



IMPACT model training for Indian Council of Agricultural Research (ICAR) – Indian Agricultural Research institute (IARI)

Feedback Survey Report

November 2025

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¹ Adapted from [Schutz et al. 2024](#).

Background

A four-day training program (24-27 November 2025) on the International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT), organized by the Division of Agricultural Economics, Indian Council of Agricultural Research (ICAR) - Indian Agricultural Research Institute (IARI), was designed to strengthen participants' capacity in global agricultural modeling and scenario-based policy analysis. Through a comprehensive curriculum developed by International Food Policy Research Institute (IFPRI), the workshop provided both conceptual grounding and hands-on experience in using the IMPACT model and its network of linked modules, including climate, water, crop, and welfare models. Participants learned to design and run scenarios in GAMS and the IMPACT Excel Interface, interpret model results, and apply them to real-world questions in agricultural policy, climate change, and trade. The program emphasized the integration of biophysical and economic data for ex-ante policy analysis and equipped researchers to conduct multi-dimensional assessments of food security, technology adoption, and environmental sustainability.

Summary Overview

To capture the changes towards outcomes from the IMPACT model training sessions provided, a survey was conducted after the training. The survey was sent to 24 recipients and there were 19 responses provided (76% response rate) between 27-28 November 2025.

Overall, the results revealed an increase in level of confidence and knowledge in the use of the IMPACT model. An increase of around 43%, on average, was observed across the questions comparing the before (29-48%) and after the training (73-81%) section.

This report presents some more details on the results and feedback received from participants to the questions (see Annex for survey questions). We use these as guidance as to how to improve in the future as well as inform possible future activities and follow-up questions.

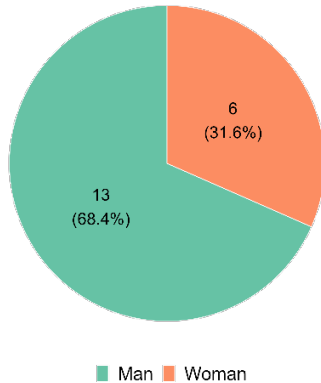
Acknowledgement

This training was funded by Alliance of Bioversity International and International Centre for Tropical Agriculture (CIAT), Rome, Italy, as part of CGIAR Science Program on Policy Innovations.

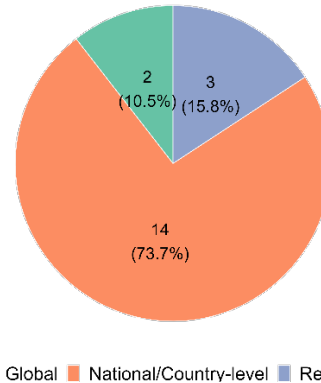
Survey Results

Part 1: General information

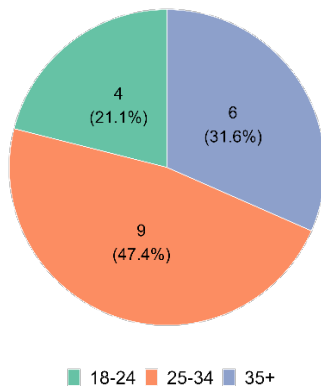
1.1. Gender distribution



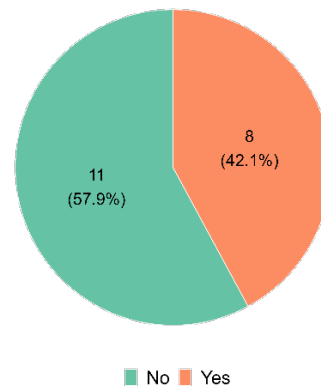
1.4. Geographic scope of work



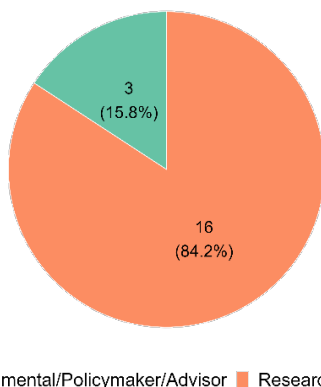
1.2. Age distribution



1.5. Attend similar past trainings



1.3. Occupation



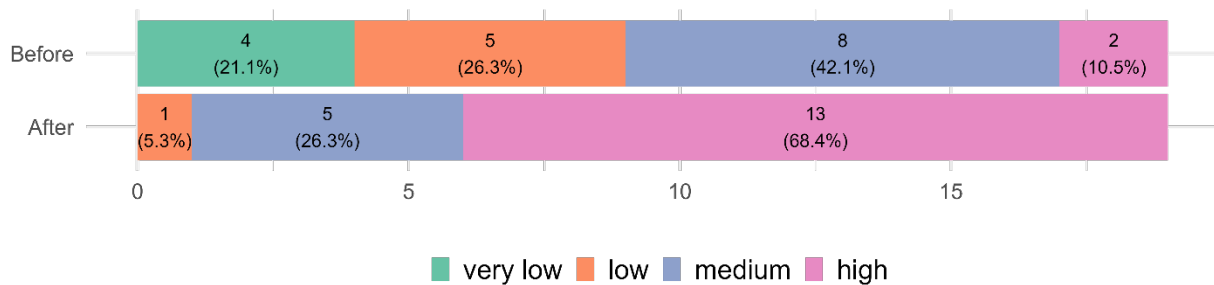
Governmental/Policy maker/Advisor Research/Academ

Part 2: Changes around confidence and knowledge

Participants were asked to rate how confident and knowledgeable they were in given areas before and after the training and the results are shown below.

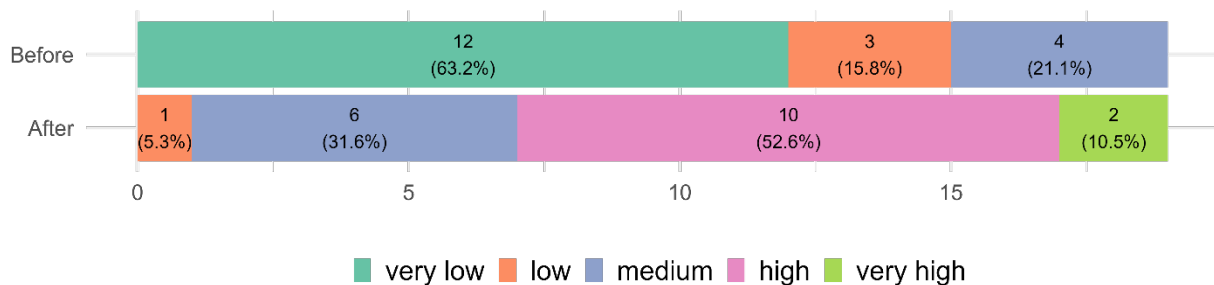
2.1. General quantitative modeling approaches, applications, and their limitations

Before the training, most participants rated themselves in the medium range (42.1%), with sizable shares in low (26.3%) and very low (21.1%); only 10.5% felt high confidence. After the training, confidence shifted strongly upward: 68.4% rated high and 26.3% medium, with just 5.3% remaining low and none very low. This indicates a clear improvement in general modeling confidence.



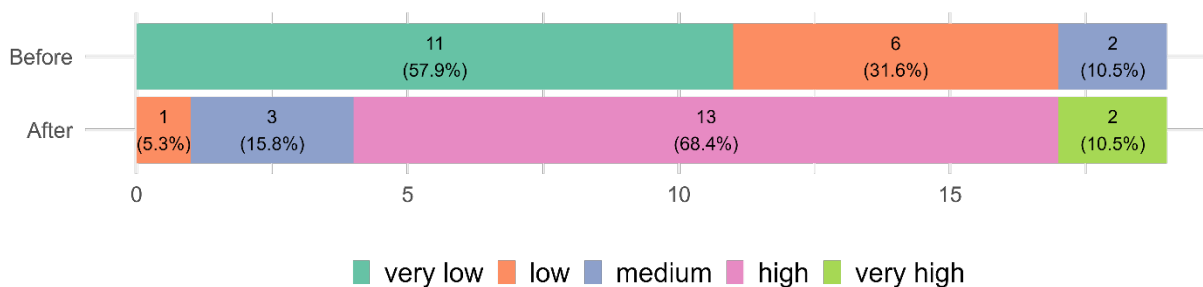
2.2. Basic theory and structure of the IMPACT model and its components including model drivers

Before the training, confidence in the theoretical structure of the IMPACT model was very limited: 63.2% reported very low confidence, 15.8% low, and 21.1% medium, with no one in high categories. This indicates a general inexperience with the IMPACT model. After the training, the distribution moved upward: 52.6% of respondents rated high and 10.5% very high their understanding of the model; 31.6% were medium and only 5.3% low. This shows a major gain in understanding of IMPACT's structure and drivers.



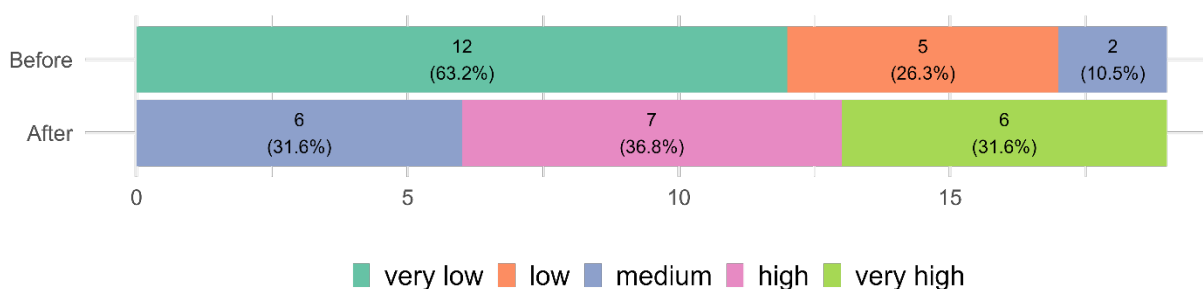
2.3. Approaches to interpreting and reporting results from IMPACT model

Initially, participants largely felt unconfident with using the IMPACT model results to compile a narrative of model results and insights: 57.9% reported very low confidence, 31.6% low, and 10.5% medium, mostly driven by the fact that this was first time for majority of participants to see how IMPACT is setup and the results which could be pulled out from IMPACT. After training, participants noted a considerable increase in their confidence: 68.4% high and 10.5% very high, while 15.8% were medium and only 5.3% low. The training substantially strengthened participants' ability to interpret IMPACT results.



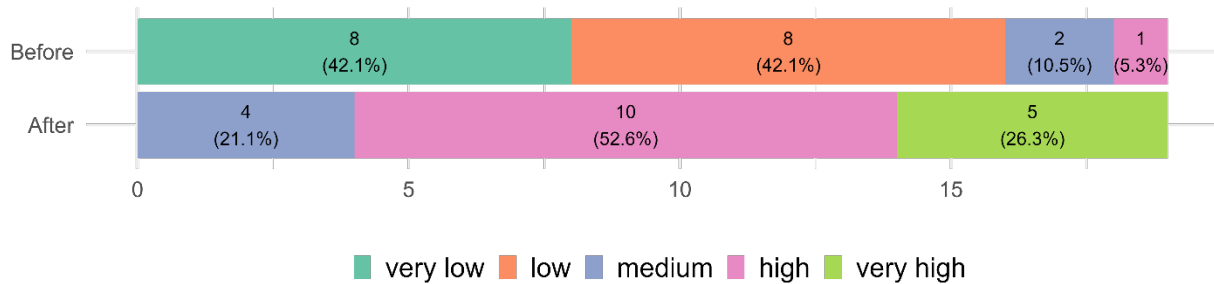
2.4. Understanding how IMPACT model results can be used to address questions of interest

Before training, most respondents rated a low understanding of how to link IMPACT results to research and policy questions of interest (63.2% very low, 26.3% low, 10.5% medium). Afterward, no one remained in very low or low-confidence category. Confidence spread fairly evenly across higher categories, with 36.8% high, 31.6% very high, and 31.6% medium. This suggests participants now feel capable of using IMPACT results to answer a question of concern.



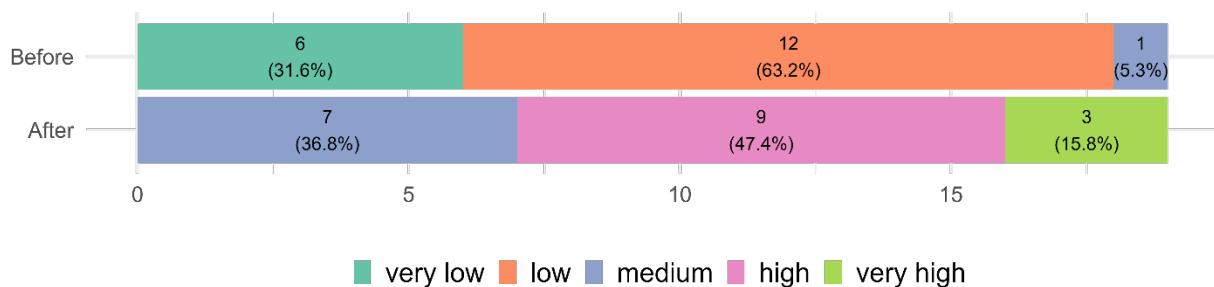
2.5. Use of IMPACT model results to support an analytical output (e.g. outlook, policy brief etc.) of the agriculture sector in a country/region of interest

Pre-training confidence on using IMPACT model results to inform research or policy outputs was low overall: 42.1% very low and 42.1% low, with just 10.5% medium and 5.3% high. Post-training, the distribution shifted heavily upward: 52.6% high and 26.3% very high, while 21.1% were medium and none low/very low. Participants now largely feel ready to use IMPACT outputs in applied analytical outputs, and also plan to work on policy briefs based on the IMPACT simulations they prepared.



2.6. Application of the scenarios in IMPACT to help with my research questions

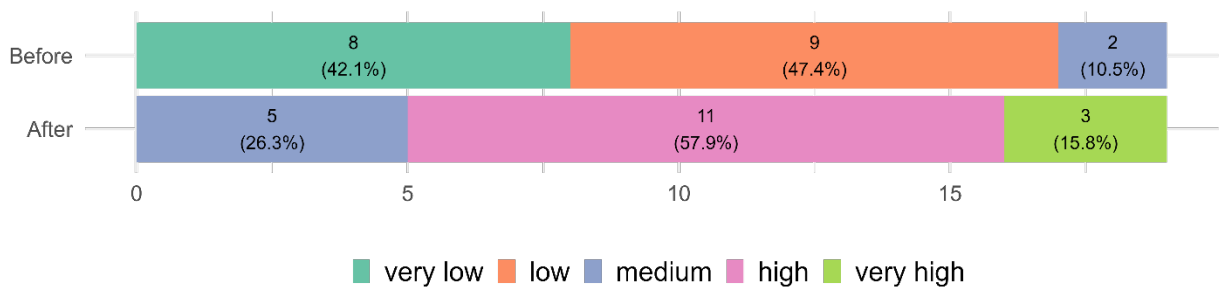
Before training, most participants rated low confidence (63.2%) and another 31.6% very low. After training, confidence rose notably: 47.4% high, 15.8% very high, and 36.8% medium, with no one in low categories. This indicates strong improvement in applying IMPACT scenarios for their own research.



2.7. Application of the scenarios in IMPACT to help develop narratives around model results

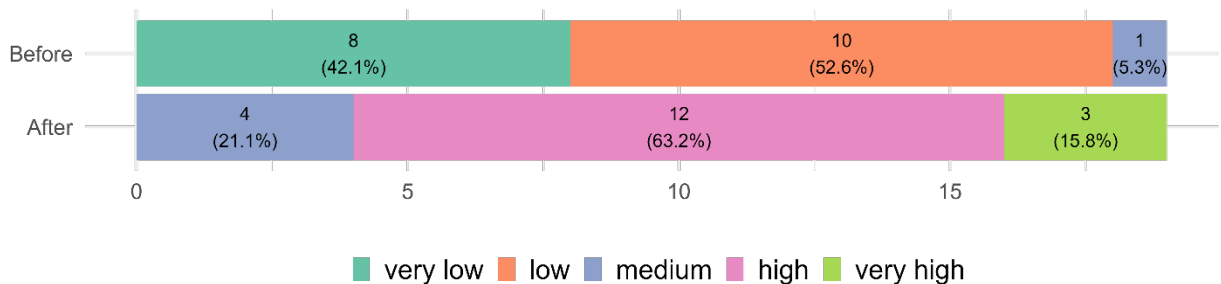
Initially, confidence was concentrated in the very low (42.1%) and low (47.4%) categories, with 10.5% rating their confidence as medium. After training, participants moved mainly into high (57.9%) and very high (15.8%), with 26.3% medium and none low/very low. The training

improved participants' ability to craft meaningful and intuitive narratives from scenario results.



2.8. Application of the scenario setup excel interface to prepare IMPACT simulations

Before training, this is the area in which participants felt least confident: 52.6% low, 42.1% very low, and 5.3% medium. After training, results shifted upward: 63.2% high and 15.8% very high, with 21.1% medium confidence rating, and zero low/very low ratings. This shows substantial gains in practical skills for setting up IMPACT simulations using the excel interface.



Detailed level of confidence and knowledge in given areas, before and after the training with difference is shown in the following table:

Level of confidence and knowledge of the participants in the given areas	Before	After	Change
General quantitative modeling approaches, applications, and their limitations	48%	73%	+24%
Basic theory and structure of the IMPACT model and its components including model drivers	32%	74%	+42%
Approaches to interpreting and reporting results from IMPACT model	31%	77%	+46%
Understanding how IMPACT model results can be used to address questions of interest	29%	80%	+51%
Use of IMPACT model results to support an analytical output (e.g. outlook, policy brief etc.) of the agriculture sector in a country/region of interest	36%	81%	+45%
Application of the scenarios in IMPACT to help with my research questions	35%	76%	+41%
Application of the scenarios in IMPACT to help develop narration around model results	34%	78%	+44%
Application of the scenario setup excel interface to prepare IMPACT simulations	33%	79%	+46%

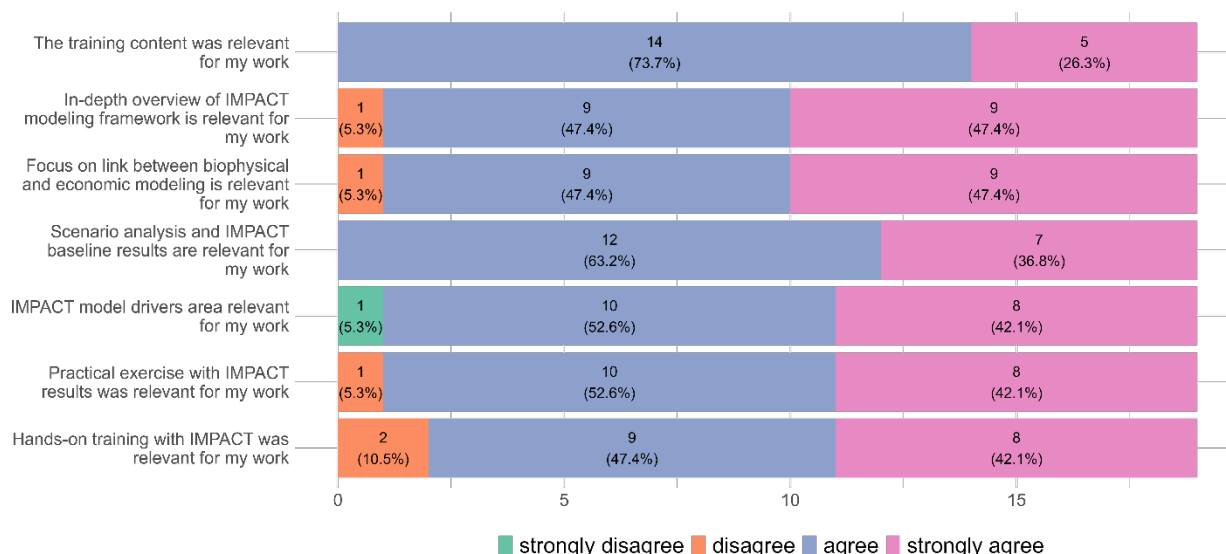
Note for scoring: very low (20), low (40), medium (60), high (80), very high (100)

Part 3: Evaluation of IMPACT model training

3.1. Relevance

All participants viewed the training as relevant. A large majority agreed (73.7%), and the rest strongly agreed (26.3%). There were no neutral or negative responses, showing universal perceived relevance. Overall, nearly everyone found the in-depth IMPACT framework overview useful for their work, which was rated very highly: 47.4% agreed and 47.4% strongly agreed. Only 5.3% disagreed. A strong appreciation of the biophysical–economic linkage was seen with 47.4% agreed and 47.4% strongly agreed, with just 5.3% disagreeing.

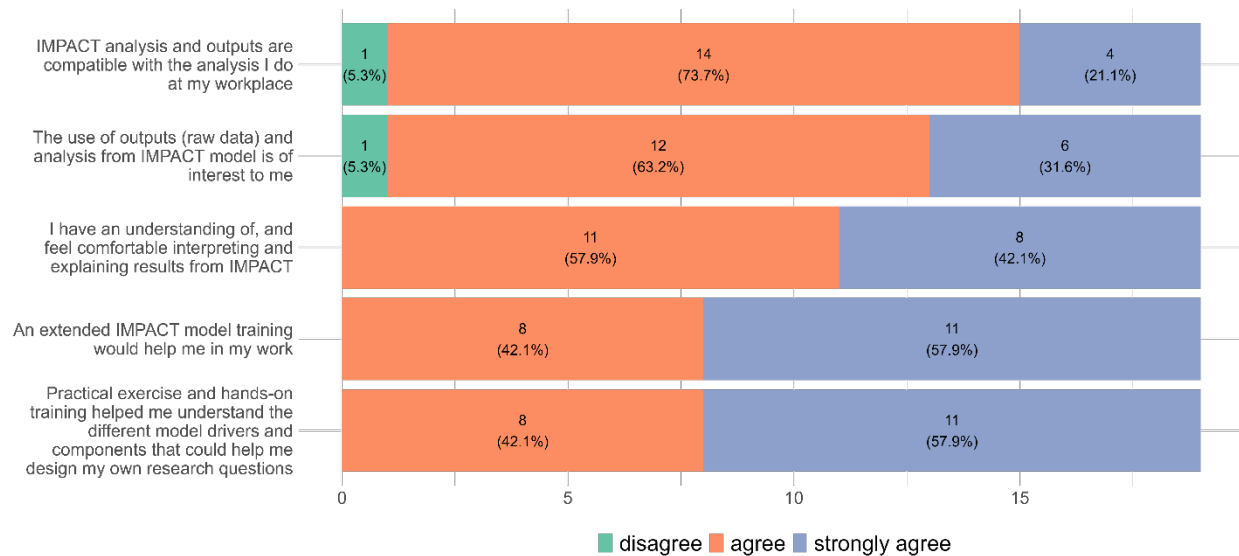
Participants universally reported that the content fit well with their work needs with 63.2% agreeing and 36.8% strongly agreeing. Most participants agreed (52.6%) or strongly agreed (42.1%) that exploring the model drivers were relevant for their own work. Relevance of the practical exercises was strong: 52.6% agreed and 42.1% strongly agreed. Only 5.3% disagreed. This suggests hands-on work with pre-prepared results was widely valued. Most respondents agreed (47.4%) or strongly agreed (42.1%) that the hands-on training utilizing the IMPACT Excel-interface was relevant, while 10.5% disagreed.



3.2. Use case in the future

Most participants see learning IMPACT, and understanding the range of results it provides, a good fit with their own work: 73.7% agreed and 21.1% strongly agreed. Only 5.3% disagreed. Interest in using IMPACT outputs is high: 63.2% agreed and 31.6% strongly agreed, with just 5.3% disagreeing. Encouragingly, nearly all participants are interested in engaging with IMPACT data and analysis, even if only with publicly available IMPACT results. Everyone

reported that they understand and feel comfortable interpreting and explaining results from IMPACT with 57.9% agreed and 42.1% strongly agreed. There were no negative responses, suggesting readiness to interpret and communicate results. Participants also strongly favored more training: 57.9% strongly agreed and 42.1% agreed. This shows clear demand for capacity strengthening, with more advanced techniques, in the future. Hands-on exercises also saw positive feedback with 57.9% strongly agreed and 42.1% agreed. Participants felt that experimenting with model drivers and levers directly supported their ability to frame and design research using IMPACT.



Part 4: Satisfaction with training

4.1. Rating for trainers

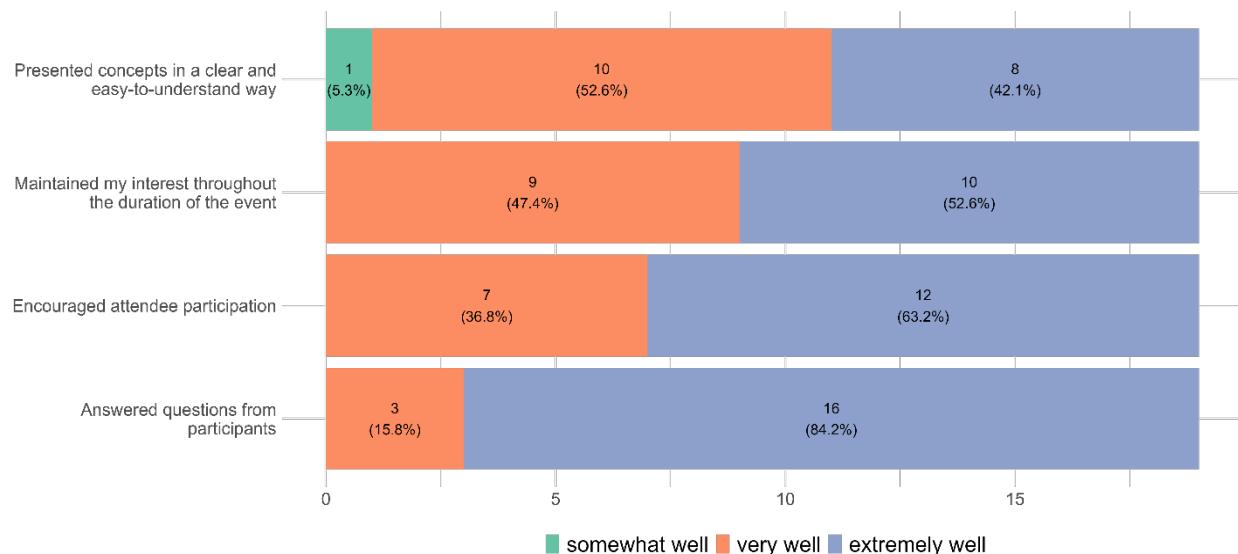
In general, trainer performance was rated high across clarity, engagement, participation, and responsiveness. Negative feedback was broadly absent, with only a single low rating on clarity; everything else was unanimously positive and often strongly so.

Ratings were overwhelmingly positive when asked if the trainers presented concepts in a clear and easy-to-understand way. About half of participants agreed (52.6%) and another large share strongly agreed (42.1%). Only one participant (5.3%) gave a negative rating. This suggests the trainers communicated concepts clearly for almost everyone.

Regarding maintenance of participant interest throughout the duration of the event, all responses were positive: 47.4% agreed and 52.6% strongly agreed. No one rated this negatively.

For encouraging attendee participation, trainers also received positive feedback. Over a third agreed (36.8%) and nearly two-thirds strongly agreed (63.2%). This indicates trainers did very well at drawing people into the discussions and activities.

Answering questions from participants was the strongest-rated aspect. A large majority strongly agreed (84.2%), and the rest agreed (15.8%). No negative responses were seen. Participants felt their questions were thoroughly and effectively addressed.



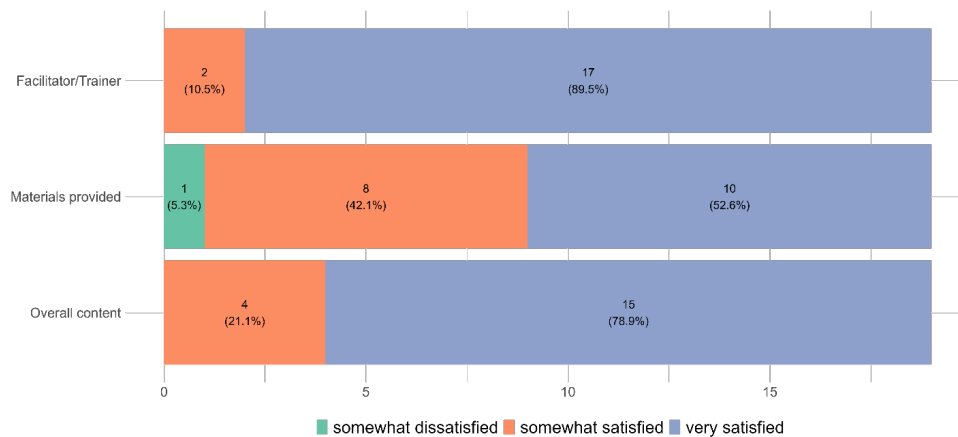
4.2. Satisfaction with event

Event satisfaction was consistently high across trainers, materials, and content, with ratings concentrated in “agree” and especially “strongly agree.” Any dissatisfaction is minimal, and limited to a single respondent noting dissatisfaction with the materials provided.

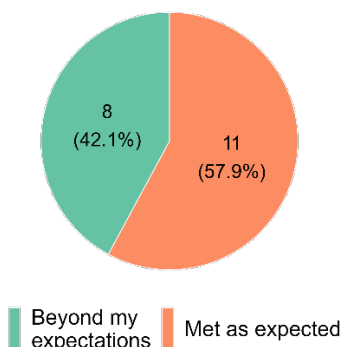
Satisfaction with the trainers was extremely high. Almost all participants strongly agreed they were satisfied (89.5%), and the remaining 10.5% agreed. There were no neutral or negative ratings, indicating near-universal high degree of satisfaction.

Participants were largely satisfied with the materials provided. A majority strongly agreed (52.6%) and another 42.1% agreed that they were satisfied. Only one participant (5.3%) gave a negative rating mentioning that it would have been better to share more reading material with the participants.

Overall satisfaction with the event content was also very strong. Most respondents strongly agreed they were satisfied (78.9%), while the rest agreed (21.1%). No one rated the content negatively, showing broad approval of what was covered.



4.3. Meeting expectations of the training



4.4. Comments from participants on what they like about the training

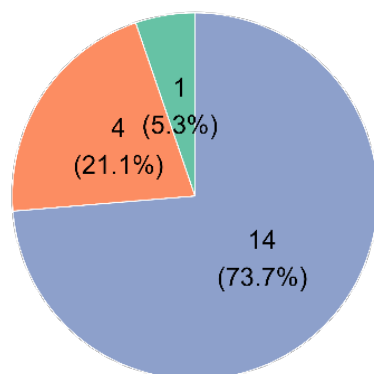
Participants highlighted the facilitators' approachability and one-on-one interaction, particularly in guiding exercises and discussions, as highlights of the training. The ability to design scenarios and results datafiles in hands-on exercises, was also noted as a positive takeaway. Furthermore, the opportunity to work in groups, design their own scenarios, and craft presentations using model results – with support from facilitators – was a benefit.

Text is presented verbatim as written by respondents

Scenario specification and aggregation modelling
Interaction
Hands on session and team wise presentations
Abhijeet sir and Sherwin sir really guide us very well throughout the training
Experts and their extra care efforts in deliberating the content
Very good and Extensive and approachable hands on training...
Hand on session
The way resource person handled every queries and provide us the freedom to set our own scenarios.
Every resource persons were so much approachable.
I liked the senerio building and presentation session.
Practical sessions with trainers one-to-one interaction with us made the training memorable...
The hands-on sessions were really useful. The group exercises and the presentation gave different ways to approach and interpret the results.
PERSONAL ATTENTION TO EACH OF US (PARTICIPANTS)

4.5. Overall satisfaction with the event

Rated between 1-5 stars, most participants rated this training as 5 stars, with 4 participants rating it as 4 star. A sole participant rated it as 1 star even though they shared as a comment “The hands-on sessions were really useful. The group exercises and the presentation gave different ways to approach and interpret the results.”

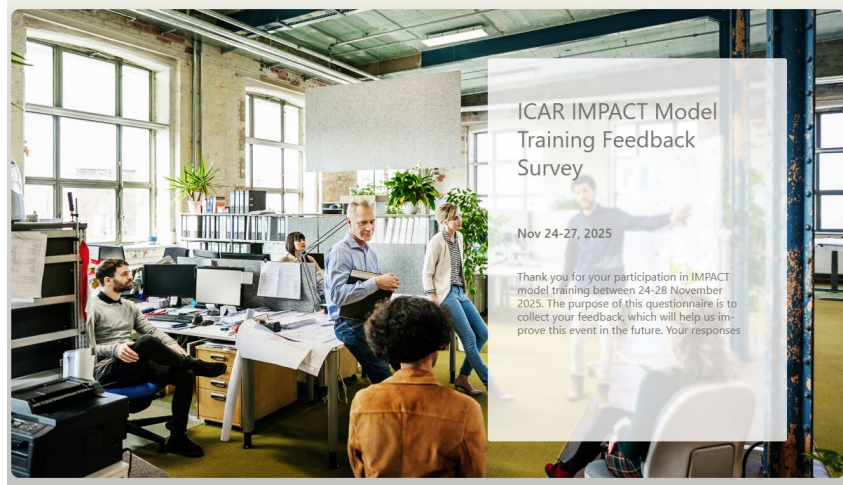


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Annex

Survey

The online survey was based on the following template:



1. What is your gender *

Woman

Man

Non-binary

Prefer not to say

2. What is your age *

18-24

25-34

35+

3. What is your occupation *

NGO/Advocacy

Private sector

Research/Academia

Governmental/Policymaker/Advisor

Other

4. What is the geographic scope of your work *

National/Country-level

Regional

Global

5. Is this your first time attending events like this? *

Yes

No



Section 2

Changes around confidence and knowledge

We ask you to rate how confident and knowledgeable you were in given areas before and after the training

6. General quantitative modeling approaches, applications, and their limitations

	Very low	Low	Medium	High	Very high
Before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Basic theory and structure of the IMPACT model and its components including model drivers

	Very low	Low	Medium	High	Very high
Before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Approaches to interpreting and reporting results from IMPACT model

	Very low	Low	Medium	High	Very High
Before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Understanding how IMPACT model results can be used to address questions of interest

	Very low	Low	Medium	High	Very high
Before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Use of IMPACT model results to support an analytical output (e.g. outlook, policy brief etc.) of the agriculture sector in a country/region of interest

	Very low	Low	Medium	High	Very high
Before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Application of the scenarios in IMPACT to help with my research questions

	Very low	Low	Medium	High	Very high
Before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Application of the scenarios in IMPACT to help develop narration around model results

	Very low	Low	Medium	High	Very high
Before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Application of the scenario setup excel interface to prepare IMPACT simulations

for *before* you can think of previous modeling work you may have done and compare it to the excel interface of IMPACT

	Very low	Low	Medium	High	Very high
Before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Evaluation of the IMPACT Model Training

14. Relevance of the training sessions *

	Strongly disagree	Disagree	Agree	Strongly Agree
The training content was relevant for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In-depth overview of IMPACT modeling framework is relevant for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Focus on link between biophysical and economic modeling is relevant for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenario analysis and IMPACT baseline results are relevant for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IMPACT model drivers area relevant for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Practical exercise with IMPACT results was relevant for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hands-on training with IMPACT was relevant for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. Forward-looking use *

	Strongly disagree	Disagree	Agree	Strongly agree
IMPACT analysis and outputs are compatible with the analysis I do at my workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The use of outputs (raw data) and analysis from IMPACT model is of interest to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have an understanding of, and feel comfortable interpreting and explaining results from IMPACT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An extended IMPACT model training would help me in my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Practical exercise and hands-on training helped me understand the different model drivers and components that could help me design my own research questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section 4

Satisfaction with training

16. How would you rate the following for the presenters? *

	Not well at all	Not very well	Somewhat well	Very well	Extremely well
Presented concepts in a clear and easy-to-understand way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintained my interest throughout the duration of the event	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Encouraged attendee participation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Answered questions from participants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. How satisfied are you with the following aspects of the event? *

	Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
Facilitator/Trainer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Materials provided	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Were your expectations of the training met?

- Beyond my expectations
- Met as expected
- Below my expectations

19. What did you like most about the event?

20. Overall, how satisfied are you with the event? *

Extremely dissatisfied ☆ ☆ ☆ ☆ ☆ Extremely satisfied

Photographs

