CGIAR Research Initiative on Sustainable Animal Productivity

Genetic evaluation and breeding program optimization training

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International Livestock Research Institute (ILRI)



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INITIATIVE ON Sustainable Animal Productivity

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| Name of training event | Genetic evaluation and breeding program optimization training |
|---|--|
| Aims of the training | To develop the capacity of researchers in genetic evaluation and |
| | animal ranking using BLUP, and how to optimize the ongoing |
| | breeding programs |
| Dates | 17–20 May 2022 |
| Venue | Debre Berhan, Amhara Region, Ethiopia |
| Instructors and their affiliation (including lead CGIAR centre) | Tesfaye Getachew (International Centre for Agricultural Research |
| | in the Dry Areas, ICARDA) |
| | Aynalem Haile (ICARDA) |
| | Berhanu Belay (ICARDA) |
| Participant information, including numbers | A total of 41 participants from 29 universities in Ethiopia, the |
| | Livestock Development Institute (LDI), the Water and Land |
| by gender and age | Resource Center (WLRC) and research centres. Two of the |
| (considering youth | participants were women. |
| as 35 years or less | |
| and non-youth as | |
| Can include a | |
| summary of | |
| participant type | |
| (e.g. livestock | |
| if relevant. Do not | |
| include names or | |
| other identifying | |
| information. | |
| Were some | |
| participants from a | |
| organization, or | |
| from a | |
| government? | |
| Delivery method | In person |
| person/hybrid) | |
| Funder—any other | N/A |
| support besides | |
| SAPLING | |
| Course summary or | The course covered pedigree and performance data preparation |
| | using Excel and R software, genetic analysis using Wombat |
| | software, interpretation of results, economic value estimation for |
| | traits, index selection and breeding value estimation in uncertain |
| | sire scenarios. |



| | Some of the data management and analysis training sessions in Debre Berhan, Ethiopia (photo credit: ILRI-ICARDA/Tesfaye Getachew). |
|-------------------|--|
| Contact person(s) | Tesfaye Getachew: <u>T.Getachew@cgiar.org</u> |
| for more | |
| information | |
| Linked initiative | Sustainable Animal Productivity for Livelihoods, Nutrition and |
| | Gender Inclusion (SAPLING) |
| Acknowledgements | This work was conducted as part of the CGIAR Initiative on |
| | Sustainable Animal Productivity. CGIAR research is supported by |
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| | partnership for a food-secure future dedicated to transforming |
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INITIATIVE ON Sustainable Animal Productivity

CGIAR's Sustainable Animal Productivity for Livelihoods, Nutrition and Gender inclusion (SAPLING) is working in seven countries focusing on livestock value chains to package and scale out tried-and-tested, as well as new, innovations in livestock health, genetics, feed and market systems. SAPLING aims to demonstrate that improvements in livestock productivity can offer a triple win: generating improved livelihoods and nutritional outcomes; contributing to women's empowerment; and, reducing impacts on climate and the environment. Its seven focus countries are Ethiopia, Kenya, Mali, Nepal, Tanzania, Uganda and Vietnam.

