

ICARDA MEL PERFORMANCE OVERVIEW

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Photos from ICARDA's Flickr Layout design and graphics from Canva Maps from Pixel Map Generator

INTRODUCTION

Dear Readers,

We would like to thank you for your feedback and engagement in the previous newsletter! We have made several updates to the data we pull and the content we share as a result. We hope to continue to improve, and again we welcome your feedback on this issue in this survey.

It is with heavy hearts that we prepare to say goodbye next month to our **Deputy Director-General**, **Jacques Wery**. Since May 2018, Jacques has been instrumental to ICARDA and the MEL team. Under his guidance, **ICARDA knowledge management** and quality of **openly accessible research outputs** have increased. We wish Jacques all the best at Supagro-INRA-CIRAD and hope to have the chance to work with him again in the future.

Keep reading to find out:



Many thanks to everyone who contributed to **ICARDA MEL Performance Overview** through direct interviews and content sharing, through regular use and uploading in MEL, and to Research Fellows Victoria Clarke, Valentina De Col, Laura Becker, and Ramya Kulkarni for producing this newsletter.



... See any missing data for your team in this issue? If yes, please log in to MEL and update your planned and reported information.

The MEL team is available as always if you need support!

GO TEAM!

TEAM SPOTLIGHT



BREEDING

We present **LEGUMES sub-team** of **BREEDING** with a focus on protein-rich crops, food legumes and more precisely **Early maturing biofortified lentils** for **South Asia** and **Sub-Saharan Africa**. First innovation representing ICARDA this year in the OneCGIAR 50th-anniversary campaign. We invited **Shiv Kumar Agrawal** and **Ashutosh Sarker** for various questions around impact results and scaling perspectives of the innovation providing health support to human, animal, and soil. The state-of-the-art technology is now adopted to fight micronutrient deficiency, known as Hidden hunger, among rural poor populations

Monitoring, Evaluation & Learning (MEL)

#Published solution on @Panorama_Planet
Biofortified lentils reach maturity quickly & are rich
with zinc and iron to fight hidden hunger.
More bit.ly/3uoL168
By Shiv K. Agrawal and Ashutosh Sarker Thanks



Ashutosh Sarker shared with us the results of the innovation:

All pulses are high in protein but lentil in particular with 27% protein. The improved lentil varieties that are early maturing are biofortified with above 70 PPM in iron and 45 pp in zinc. Thus, per hectare, we have a benefit: cost ratio of 3 for the production of biofortified lentils. These varieties imply high yields and more micronutrients, provided we give more emphasis on quality seed production, and demonstrations for dissemination among the farmers helping the product to be accessible to the consumers.

Results:

- 99 per cent of the 150,000 hectares of lentil –growing land in Bangladesh are now planted with the improved lentil varieties. The additional domestic lentil production in Bangladesh has replaced expensive imports.
- Nepal has become a net exporter of lentils. About 36,000 tons of addition lentils produced using improved technologies is worth US\$28.9 million.
- Lentil production in India has increased from 1.06 million tons in 2012 to 1.64 million tons in 2018, and yields have improved from 678 kg/ha in 2011to1006kg/ha at present. With the improved production package, biofortified varieties showed a 35–67 per cent yield advantage over local cultivars.
- Farmers participated in technology up-scaling following the recommended package of practices, upgraded knowledge and skills through Training, Field Days, Exposure Visits, etc.

Project completion status ! Completed Ongoing New 0% 25% 50% 75% 100%

LEGUMES Identity card

Team leader: Shiv Kumar Agraval

Acronym: LG

<u>Objectives</u>: make the crops more productive, nutritious, and competitive.

Commodities: lentil, grass pea, kabuli chickpea, Faba bean.

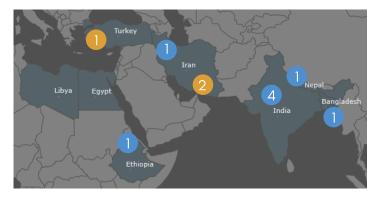
<u>Activities</u>: Breeding, Development of genetic and genomic resources, Knowledge generation, Production and protection technologies, International Nurseries, Trainings, Demonstrations, and Seed production.

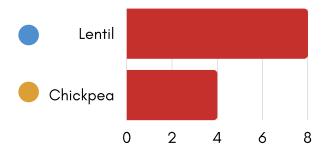


Disclaimer: Mel uses group function, that is, there are instances where a project may have more than one agreement number (for example, jointly funded projects, CRP activity agreement, Multi-year country contribution). Therefore, the number of projects maybe lower than the total count of agreements.

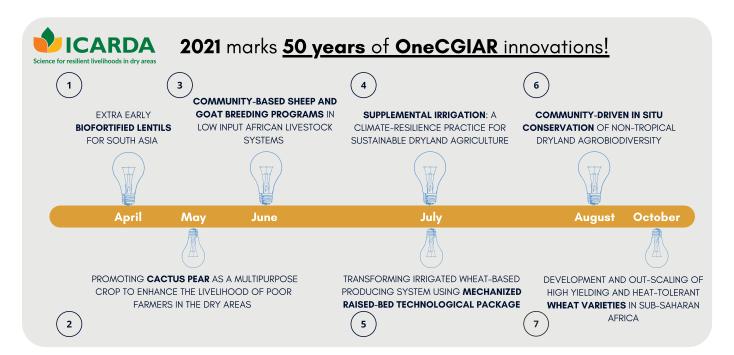
New (approved) crop varieties per type per country (2020)

Number of new (approved) crop varieties per type (2020)





Release year: 2018 to 2020 Release year: 2018 to 2020



Spotlight innovations supporting scaling of CLCA project

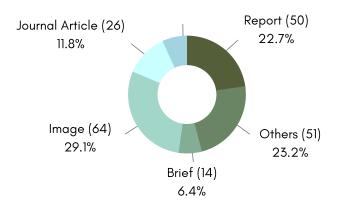
Innovations facilitating uptake of Conservation Agriculture (CA) in the context of North Africa. Effectively, 5 innovations are coming very strong in Algeria and Tunisia – stay tuned:

- 1. <u>Inclusion of forage mixtures in the cereal-based system</u> for biomass production providing soil cover and high-quality feed for livestock.
- 2. <u>Small-scale mechanization of the livestock and forage-based activities</u>, hence reducing work load and offering opportunities for new ideas for rural business.
 - 3. <u>Business Model Development</u> for "Boudour" Zero-Till Seeder in Algeria. This solution has allowed CA in Algeria to expand to new areas, particularly in the West and to facilitate market access for CA farmers' adopters.
- 4. Alternatives to the summer cereal stubble grazing. (i) stubble grazing tool optimizing the use of stubble for grazing and mulching and (ii) grazing dried vetch pastures as a substitute to intensive grazing of the wheat stubble.
 - 5. <u>Crop rotation</u> and <u>rational N Fertilization</u> on the agronomic and economic performance of Durum Wheat in rainfed area.



TRENDING TOPICS JAN-FEB 2021

INFORMATION PRODUCTSTHE 5 MOST PUBLISHED TYPES:



220 INFORMATION PRODUCTS



Data can be exported from
MEL - Knowledge Evaluation
https://mel.cgiar.org/reporting/reportslist

Journal Articles (JA)



8 JA indexed in Scopus and not reported in MEL

5 JA indexed in Web of Science and **not reported** in MEL

13 JA reported in MEL



Total number of ISI Journal Articles published by Team

#Team members # ISI publications **Team** Breeding and Scalling Improved Varieties of dryland cereals and pulses - BREEDING Farming with Alternative Pollinators - FAP Geo BigData Driven Digital Augmentation for Sustainable Agro-0 ecosystems - GeoAgro Genetic Resources, conservation, characterization, and use - GRS 0 5 Resilient Agrosilvopastoral Systems - RASP Social Economy and Policy Research - SEP 1 Seed systems, International Nurseries and seed Health - SINH 2 Soils, Waters and Agronomy - SWA

Note: The number of Team members correspond to the International recruited staff (IRS) including seconded and CIM experts.

Note: Publications were counted based on the authors' affiliations to the new Team structure, taking into account collaborations between Teams.



Would you like to know more about Web of Science indexing? Go to the Tips & Tricks section (page 11)



TRENDING TOPICS JAN-FEB

Note: Altmetrics and data on most downloaded knowledge product refer only to information products published in Jan - Feb 2021, whereas the most viewed are the most viewed in Jan - Feb 2021 among all published information products in MEL.



JOURNAL ARTICLES WITH HIGHEST ALTMETRICS SCORES



 Phytosanitary Interventions for Safe Global Germplasm Exchange and the Prevention of Transboundary Pest Spread: The Role of CGIAR Germplasm Health Units | HANDLE https://hdl.handle.net/20.500.11766/12737



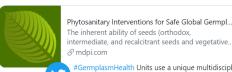
Why such a high score?



Read more here

https://www.altmetric.co m/details/99789117#score





GermplasmHealth Units use a unique multidisciplinary approach to ensure phytosanitary protection for safe conservation and movement of germplasm from @CGIAR genebanks and breeding programs bit.ly/2LU5X31

mdpi.com/2223-7747/10/2... @l_lava @IITA_CGIAR @RadioIITA @iitacomm



 Comparative ecology of two specialist bees: Dasypoda visnaga Rossi, 1790 and Dasypoda maura Pérez, 1895 (Hymenoptera, Melittidae) | HANDLE https://hdl.handle.net/20.500.11766/12643



• Genetic diversity and recombination between turnip yellows virus strains in Australia | HANDLE https://hdl.handle.net/20.500.11766/12720



INFORMATION PRODUCTS MOST VIEWED

- Managing rangelands: promoting sustainable native shrub species: Fire Bush: the multipurpose sand dune stabilizer | 204 visits | https://hdl.handle.net/20.500.11766/3275
- SeedInfo No 60 | 192 visits | https://hdl.handle.net/20.500.11766/12325
- Barley research in India: challenges and opportunities | 143 visits | https://hdl.handle.net/20.500.11766/5783



INFORMATION PRODUCTS MOST DOWNLOADED

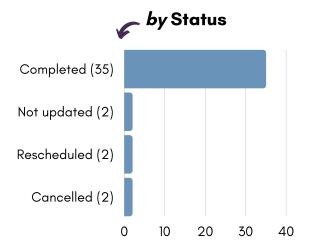
- SeedInfo No 60 | 157 downloads | https://hdl.handle.net/20.500.11766/12325
- Guidelines on soil salinity and irrigation water on date palms | 72 downloads | الدليل الارشادي لتأثير <u>https://hdl.handle.net/20.500.11766/12499</u> | ملوحة التربة ومياه الري على نخيل التمر
- Guideline on the date palm nutrients deficiency | 45 downloads | الدليل الارشادي لمعرفة نقص العناصر https://hdl.handle.net/20.500.11766/12498 | الغذائية على نخيل التمر

MELSpace offer information products in other languages. Browse at repo.mel.cgiar.org



TRENDING TOPICS JAN-FEB 2021

DELIVERABLES IN MEL

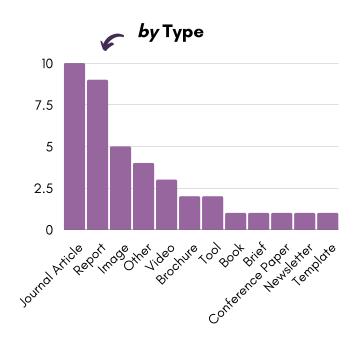




Please remember to update (upload, cancel or postpone) your deliverables in MEL or contact the responsible colleague in your team for support.

When the reporting is concluded, please don't forget to mark the deliverable as completed.





Completed deliverables



- Resilient Agrosilvopastoral Systems RASP
- Breeding and Scalling Improved Varieties of dryland cereals and pulses BREEDING
- Monitoring, Evaluation and Learning MEL
- Social Economy and Policy Research SEP
- Soils, Waters and Agronomy SWA
- Communications COM
- Seed systems, International Nurseries and seed Health SINH
- Farming with Alternative Pollinators FAP
- Capacity Development CDU
- Genetic Resources, conservation, characterization, and use GRS
- Geo BigData Driven Digital Augmentation for Sustainable Agro-ecosystems - GeoAgro

- 6 Rangeland Ecology and Forages 1 Restoration Initiative on Dryland Ecosystems RIDE
- 2 Bread Wheat BW 1 Durum Wheat DW 1 BREEDING
- 1 Legumes LG 1 Integrated Pest Management IPM
- 3 Knowledge Management KM 1 Monitoring & Evaluation M&E
- 1 Research Software Development RSD
- 1 International Nurseries IN
- 1 Seed systems SINH



TRENDING TOPICS JAN-NOV 2020

INNOVATIONS

COMMUNITY-BASED MECHANIZED RAISED **BED TECHNOLOGICAL PACKAGE (MRB)**

MRB-technology is adapted to dryland conditions and improves water use efficiency, improving farmers livelihoods, through increased farm productivity with less inputs.

Local Geographical scope: Oldland of Egypt (Nile Delta and Valley) and El-Gazera scheme in Sudan

Partners/Donors: African Development Bank, Bill and Melinda Gates Foundations, United States Agency for International Development, International Fund for Agricultural Development, European Union, Food and Agriculture Organization, Government of Egypt and Sudan

Stage of development: 4 - Taken up by next users

What does the innovation entail?









Traininas/ Extension

Tractor

Aaronomic practices

Production & management

Results and benefits



Cost effective/ risk averse



Partnerships

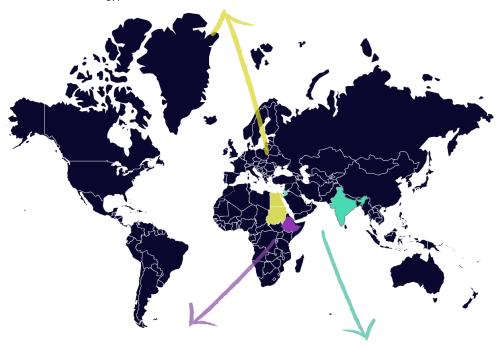
30% Wheat/ rainfed crops



750,000

25%

Farmers Water savings



TARGETING YOUTH AS DISSEMINATORS OF MARKET-ORIENTED SHEEP FATTENING

ICARDA is successfully implementing a scaling approach that targets youth as influencers in the dissemination of improved sheep fattening (SF) practices with a market orientation. This approach shows promise in improving gender and youth inclusion

Local Geographical scope: Ethiopian Highlands: Menz, Bonga, Doyogena

Partners/Donors: African Development Bank-funded Technologies for African Agricultural Transformation, Livestock Compact, Southern Agricultural Research Institute, Amhara Agricultural Research Institute

Stage of development: 4 - Taken up by next users

Partnerships Business/

What does the innovation entail?

Disclaimer: The borders represented in this map are from an external source and do not reflect an official stance by ICARDA







Trainings/









Results and benefits



44-67% Income Sheep breeds

26% Group membership incl. women

Youth groups

CACTUS PEAR AS A MULTIPURPOSE CROP

Cactus pear as a multipurpose crop used by millions of farmers in dry areas for nutritional and income creating purposes under changing climate and land use.

Local Geographical scope: India, Jordan, APRP

Partners/Donors: African Development Bank, Bill & Melinda Gates Foundations, United States Agency for International Development, International Fund for Agricultural Development of the United Nations, European Union, Food and Agriculture organization of the United Nations, Government of Egypt and Sudan

Stage of development: 3 - Available for use

What does the innovation entail?

and



Trainings/ Extension



Aaronomic



Business/ Market

Results benefits



risk averse

Cost effective/ savings

Water

Partnerships

Millions **Farmers**



TRENDING TOPICS

INNOVATIONS

In February, the MEL Team have organised two appointments on CRP Reporting (GLDC, RTB, FISH) to guide on how to report innovations in MEL. These appointments have targeted cluster leaders and researchers/principal investigators.

A refresh of the definition: how has CGIAR redefined the "innovation" concept?

Innovation - central to impact at scale - is the package of complementary contributions needed to develop and take to scale products, services and solutions - happens within innovation systems of partnerships, networks, assets and institutions. This leads to re-think the innovation in CGIAR strategy <u>here</u>, not as a single variety but as the full package needed to generate an impact. This means that while it seems repetitive to count the same variety for each country, technically we have a different context each time. You may find a full overview <u>here</u>.

Here, you will access a step-by-step approach on how to record innovations in MEL. Creating records for innovation reports are allowed for cluster leaders, which can then be assigned to the activity leader or focal scientist who will complete the reporting of the innovation. You, as a recorder, will record the information in MEL following a template. Once drafted, the drafted template will be sent to a **reviewer** who will confirm the innovation, request edits, or cancel the innovation. Once completed and confirmed by the reviewer, the innovation will appear as Approved (will now be submitted, and approved by the CRP Program Manager).

Documenting an Innovation: tips & reporting metadata

Title

Should be **informative** and **focused** on the innovation itself, in a straightforward manner (remember to **spell out all acronyms**).

Dos: Quality Control panel developed and initially validated in groundnut and pearl millet



Don'ts: QC panel developed and initially validated in groundnut and pearl millet



Dos: Crop modelling tools for identifying the GxExM options for enhancing resilience and productivity of



Don'ts: Cropping system modelling tools

If the innovation is at stage 3 and 4, the number of innovations should be included.



Dos: Five soybean (high yield & large size) and six cowpea genotypes (multi-traits) selected for further integration into cropping systems in Mozambique



Don'ts: Legume screening for integration into cropping systems

Description

Focus on the main finding(s)/innovative solution(s), how it works, and who are the target users. Focus on the innovation itself, and not on the project.

Make it more understandable for non-specialist readers, split sentences when needed to make reading easier, and spell out acronyms when mentioned for the first time.

• Stage: 1. Development/End of research; 2. Piloting ; 3. Ready for uptake and 4. Uptake by next users



Type

Each innovation should be mapped to a preexisting type. Consult the SMO guidelines for their definitions.



Genetic: Varieties & Breeds



Biophysical Research 🍎 💦 Social Science





Product Systems & Management Practices



Research & Communication Methodologies and Tools

Geographic scope

The scope of research, testing, intended area of use or actual uptake at the time the innovation is recorded.

Evidence

Evidence should be presented to validate the specific claims made about the innovation and they depend on the stage of the innovation. Report the most recent evidence, if possible.

Have you been innovative lately?



MEL Team provides support in documenting your innovation to ensure the sustainability of the research findings. Different databases can be fit. In uploading your innovation in MEL as per guidance above or in contacting ICARDAsolutions@cgiar.org you will have support in documenting your innovation on MEL, IFAD Rural Solution, WOCAT, Panorama Solutions, and many others.

Documentation helps...



Sustainability of research findings produced and capitalized in one space (a THEGLOBAL GOALS portal, a database or a platform).



Knowledge sharing of information in different forms, from communication products (blogs, infographics, etc.) to a wide range of knowledge products (reports, publications, outcome stories), permitting a wider reach and accessibility of the information.



Visibility with a wider reach and accessibility of the information as it can be retrieved from different databases turned into communication, knowledge products or data visualization.



Replicability as it highlights impact results helping stakeholders adopt/adapt the solution/innovation and replicate where it has a contextual fit.

Stay tuned for...

- Guide advising on best-fit portal for your innovation
- Seminar on documentation
- E.g. Panorama Solutions <u>here</u>, WOCAT database <u>here</u>, and Rural Solution <u>here</u>.

TIPS & TRICKS

NEW! MEL LIVE CHAT

We've all been there... that moment when you can't find what you're looking for in MEL or need to ask someone how to do something. Now, wherever you go in the mel.cgiar.org page, you will always have this **chat option in the bottom right corner:**



IS THIS JOURNAL ARTICLE ISI?

Currently, to assess the quality of journal articles, OneCGIAR and ICARDA use the **Web of Science (WOS) Core Collection** within the WOS database, which spans across disciplines and regions and includes only journals that demonstrate high levels of editorial rigor and best practice (<u>source</u>).

While you may still find the term "ISI" as the indexing was originally produced by the Institute for Scientific Information (ISI), now we refer to the indexing in Web of Science (WOS) and specifically to the WOS Core Collection.

HOW TO CHECK IF A JOURNAL ARTICLE IS INDEXED IN THE WEB OF SCIENCE (WOS) CORE COLLECTION



- 1. **Connect** to the WoS Master Journal List webpage at mil.clarivate.com/home
- Copy the Journal ISSN (International Standard Serial Number) in which the Journal Articles was published
- 3. Check if the Journal is reported under one of these four Core Collections:
 - a. Science Citation Index Expanded (SCIE)
 - b. Social Sciences Citation Index (SSCI)
 - c. Arts & Humanities Citation Index (AHCI)
 - d. Emerging Sources Citation Index (ESCI)
- 4. If the Journal is reported, then it is considered to be "ISI"

THANK YOU!



Thank you for reading the second ICARDA MEL Performance Overview!



We'd love to hear what you think and your ideas for the next edition!



To share, please respond to a 3-minute survey here.