

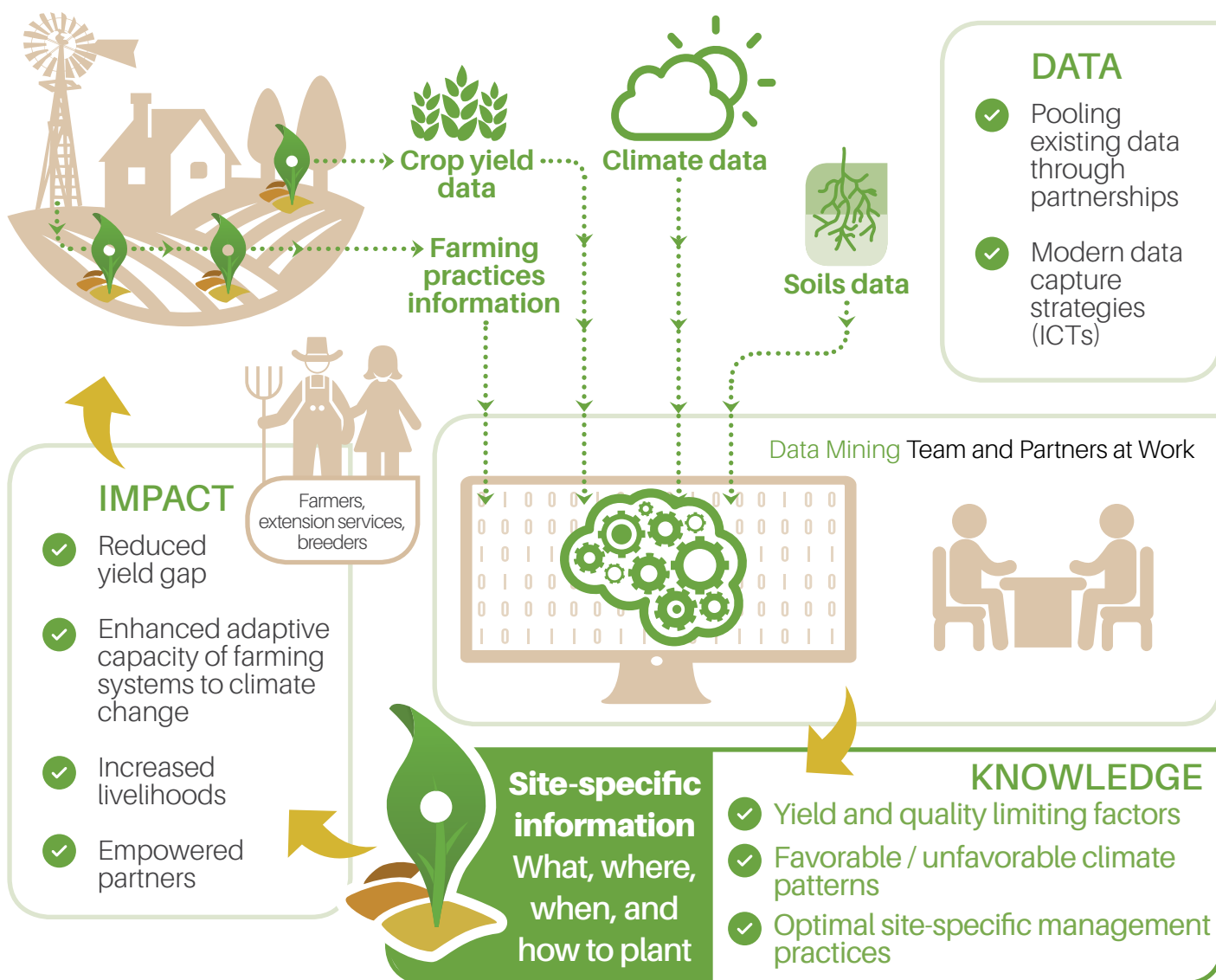
Site-Specific Agriculture

Putting data at the service of agriculture

Mining large amounts of existing crop, soil, and climate data, and analyzing new, non-experimental data can help optimize production and make agriculture more resilient to climate change.

Our objectives:

- Democratize the use of data and information in agriculture.
- Promote data-driven agronomy and site specific management.






Approach tested

with
 **11 crops**
 and **livestock**

- | | |
|---|--|
| Sugarcane  | Bean  |
| Andean Blackberry  | Mango  |
| Limes  | Maize  |
| Plantain  | Rice  |
| Avocado  | Banana  |
| Lulo  | |

Data on

48000
 crop harvests
 analyzed


4
 partners
 fully empowered
 now working
 autonomously
 with the
 methodology

Approach being
 implemented
 in

5
 countries


100% free
 software &
 mobile App
 for Android

International Awards


UN Global Pulse, 2014
 Big Data
 Climate
 Challenge


World Bank Innovation Challenge, 2014
 Big Data for
 Development

Meet the team

Daniel Jiménez, Ph.D. Team leader
 Makes agriculture meet machine learning.

Sylvain Delerce, M.Sc. Coordinator of the analysis team
 Keeps the feet of the team on the ground.

Luis Armando Muñoz, M.Sc. Projects coordinator and knowledge management expert
 Ensures the team speaks human language when delivering results to end-users.

Hugo Andrés Dorado Statistician undergoing a mutation into a data scientist
 Maestro in R to design algorithms. Makes the server sweat.


Andrés Aguilar, Agricultural engineer
 The last recruit. Already flying as high as the rest of the team.


Victor Hugo Patiño, Climate specialist
 Able to ride all terrains of climate series.


Juan Felipe Rodríguez, Informatician
 Architect of our information system. Makes data available for the team to play 24/7.

James Cock, Team mentor
 Pioneer of the site-specific Ag concept in the Colombian sugarcane sector.

Scientific papers selection

 Cock J; Oberthür T; Isaacs C; Läderach PR; Palma A; Carbonell J; ... Anderson, E. (2011). Crop management based on field observations: Case studies in sugarcane and coffee. *Agricultural Systems* 104(9):755-769. doi:10.1016/j.agry.2011.07.001

 Jiménez D; Cock J; Jarvis A; García J; Satizábal HF; Van Damme P; ... Barreto-Sanz MA. (2011). Interpretation of commercial production information: A case study of lulo (*Solanum quitoense*), an under-researched Andean fruit. *Agricultural Systems* 104(3):258-270. doi:10.1016/j.agry.2010.10.004

 Jiménez D; Cock J; Satizábal HF; Barreto-Sanz MA; Pérez-Urbe A; Jarvis A; Van Damme P. (2009). Analysis of Andean blackberry (*Rubus glaucus*) production models obtained by means of artificial neural networks exploiting information collected by small-scale growers in Colombia and publicly available meteorological data. *Computers and Electronics in Agriculture* 69(2):198-208. doi:10.1016/j.compag.2009.08.008

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