



Definition of SPA

- Area1 - SPA Overview
- Lesson1 - Introduction to SPA
- Sequence ID - 2

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About the Teachers

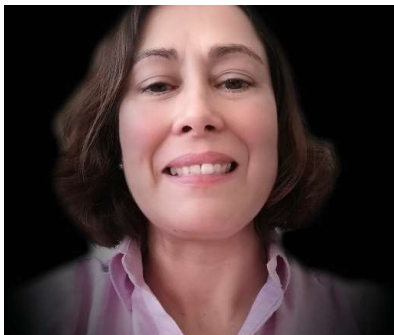


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DISCLAIMER

A1.L1.T2 Definition of SPA:

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Definition of Sustainable Precision Agriculture



Objectives:

- To define Sustainable Precision Agriculture (SPA);
- To enumerate some of the different processes and methods that can be involved in the use of SPA;
- To identify the dimensions of Sustainable Precision Agriculture, knowing their relative weight;
- To evaluate different options regarding agronomy, economy and technology issues in Precision Agriculture.





SPA definitions

Precision Agriculture is a management strategy that gathers, processes and analyzes temporal, spatial and individual data and combines it with other information to support management decisions according to estimated variability for improved resource use efficiency, productivity, quality, profitability and sustainability of agricultural production.

A decorative graphic consisting of several green squares of varying sizes and opacities, some with soft shadows, arranged in a cluster on the left side of the slide.

ISPA

International Society of Precision Agriculture



Other SPA definitions

(Applying inputs at the) Right time, the Right amount and the Right place (Robert, 1994). Later, the International Plant Nutrition Institute added another “R” to that list, “the Right Source”, and more recently, Khosla (2008) proposed an additional “R”, the Right manner (Khosla, 2008).

Precision agriculture is a management strategy that uses information technologies to bring data from multiple sources to bear on decisions associated with crop production (National Research Council, 1997).

Precision farming or precision agriculture is a farming management concept based on observing and responding to intra-field variations. Today, precision agriculture is about whole farm management with the goal of optimizing returns on inputs while preserving resources (Wikipedia, 2019).



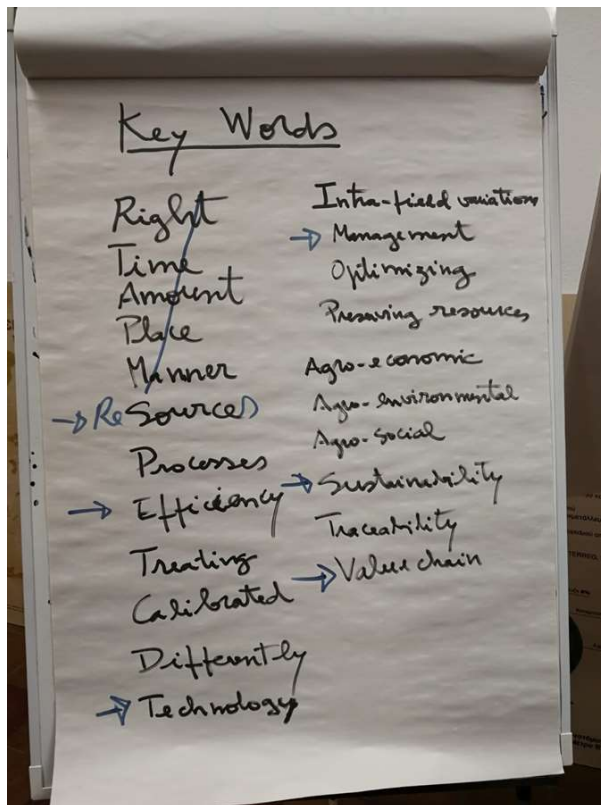
Other SPA definitions

Precision Agriculture consists of treating differently what is different using for such calibrated and resilient technology in order to increase the efficiency of agro-economic, agro-environmental and agro-social processes (Marques da Silva, 2018).

More definitions can be found on:

http://www.grap.udl.cat/en/presentation/pa_definitions.html

How to create a definition?



List of Key Words

Right
Time
Amount
Place
Manner
Sources
Processes
Efficiency
Treating
Calibrated
Differently
Technology

Intra-field variation
Management
Optimizing
Preserving resources
Agri-economic
Agri-environmental
Agri-social
Sustainability
Traceability
Value chain



SPARKLE SPA definition

From the presented list of keywords, a new SPA definition was built through a brainstorming process involving all the SPARKLE partners:

Managing **resources** effectively with **technology** in order to achieve **agricultural sustainability** throughout the **value chain**.



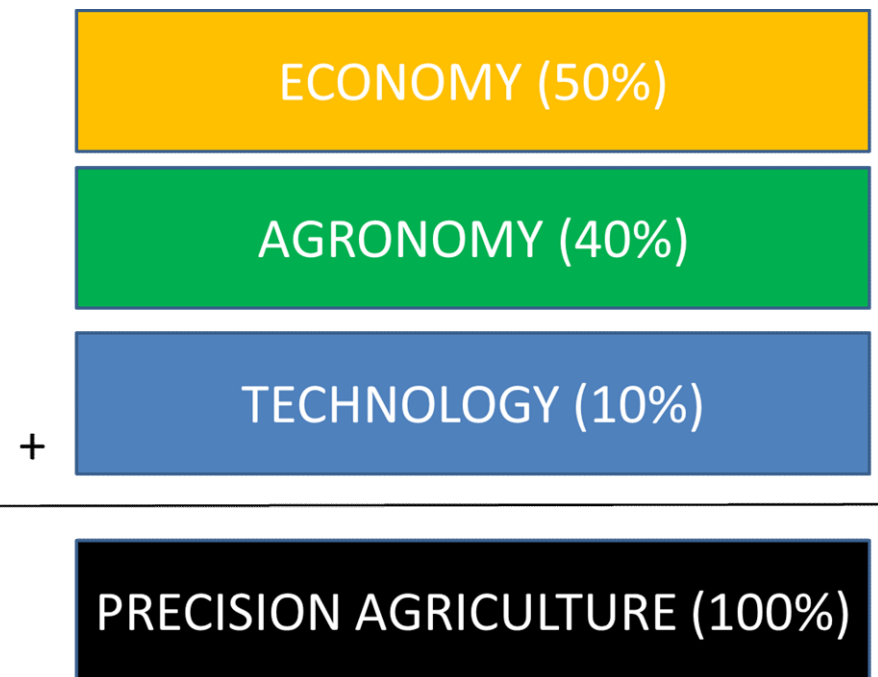
What can we consider as dimensions of SPA?



Precision Agriculture needs:

- Business vision
- Good agronomy
- Appropriate technology

Figure represents the weight of the operational aspects of Precision Agriculture



References



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- ❖ Wikipedia contributors. (2019, June 8). Precision agriculture. In *Wikipedia, The Free Encyclopedia*. https://en.wikipedia.org/wiki/Precision_agriculture

Links



- ❖ <https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/precision-agriculture>
- ❖ <https://www.youtube.com/watch?v=WhAfZhFxHTs>
- ❖ <https://www.ispag.org/>

