Concepts on Food Production

Concept	Definition	Reference
Climate-smart agriculture	Climate-Smart Agriculture (CSA) is an approach to help the people who manage agricultural systems respond effectively to climate change. The CSA approach pursues the triple objectives of sustainably increasing productivity and incomes, adapting to climate change and reducing greenhouse gas emissions where possible. This does not imply that every practice applied in every location should produce "triple wins". Rather the CSA approach seeks to reduce trade-offs and promote synergies by taking these objectives into consideration to inform decisions from the local to the global scales and over short and long time horizons, to derive locally-acceptable solutions	FAO. http://www.fao.org/climate-smart-agriculture/overview/en/
Community supported agriculture	Community Supported Agriculture is a partnership between a farm and consumers where the risks and rewards of farming are shared. No two CSAs are alike, but all CSAs are generally organized according to 4 principles: - Partnership: CSA is based on a partnership, usually formalised as an individual contract between each consumer and the producer, and characterised by a mutual commitment to supply one another (with money and food) over an extended period of time, beyond any single act of exchange. The contracts, oral or written, last for several months, a season or a year. - Local: CSAs are part of an active approach to relocalising the economy. But local in the CSA movement is not restricted to a geographical meaning. The idea is that local producers should be well integrated into their surrounding areas: their work should benefit the communities which support them. - Solidarity: CSAs are based on solidarity between producers and support groups and involve: Sharing both the risks and the benefits of a healthy production that is adapted to the natural rhythm of the seasons and is respectful of the environment, natural and cultural heritage and health.; Paying a sufficient fair price up-front to enable farmers and their families to maintain their farms and live in a dignified manner. - The producer/consumer tandem: is based on direct person-to-person contact and trust, with no intermediaries or hierarchy.	URGENCI. 2013 "European Handbook on CSA". http://urgenci.net/csa4europe/european-handbook-on-csa/
Conservation agriculture	Conservation Agriculture is a farming system that promotes maintenance of a permanent soil cover, minimum soil disturbance (i.e. no tillage), and diversification of plant species. It enhances biodiversity and natural biological processes above and below the ground surface, which contribute to increased water and nutrient use efficiency and to improved and sustained crop production	FAO. http://www.fao.org/conservation-agriculture/en/

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Ecosystem approach	The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. It is based on the application of appropriate scientific methodologies focused on levels of biological organization which encompass the essential processes, functions and interactions among organisms and their environment, and recognizes that humans, with their cultural diversity, are an integral component of ecosystems	Secretariat of the Convention on Biological Diversity 2004. "The Ecosystem Approach, CBD Guidelines". Montreal: Secretariat of the Convention on Biological Diversity.
Organic agriculture	Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasises the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfil any specific function within the system	IFOAM. https://www.ifoam.bio/en/organic-landmarks/definition-organic-agriculture
Permaculture	Permaculture is the conscious design and maintenance of agriculturally productive ecosystems which have the diversity, stability, and resilience of natural ecosystems. It is the harmonious integration of landscape and people providing their food, energy, shelter, and other material and non-material needs in a sustainable way	Ferguson, R.S. & Lovell, S.T. 2014. "Permaculture for agroecology: design, movement, practice, and worldview. A review". Agron. Sustain. Dev. 34: 251.
Precision agriculture	Precision agriculture is a management strategy that utilizes site-specific information to precisely and economically manage and optimize production inputs. A management system that is information and technology based, is site specific and uses one or more of the following sources of data: soils, crops, nutrients, pests, moisture or yield, for optimum profitability, sustainability and protection of the environment. It encompasses the use of computers, satellite positioning systems and remote sensing devices to provide information on which enhanced decisions can be made.	United States Department of Agriculture. National Agricultural Library: https://agclass.nal.usda.gov/mtwdk.exe?k=glossary&l=60&w=10519&n=1&s=5&t=2
Sustainable Food Systems	A sustainable food system (SFS) is a food system that ensures food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition of future generations are not compromised	HLPE. 2014 "Food losses and waste in the context of sustainable food systems"