

## GLOSSARY OF KEY TERMS

**Breeder seed:** Breeder seed is produced by or under the direction of the plant breeder who selected the variety. During breeder seed production, the breeder or an official representative of the breeder selects individual plants to harvest based on the phenotype of the plants. Breeder seed is produced under the highest level of genetic control to ensure the seed is genetically pure and accurately represents the variety characteristics identified by the breeder during variety selection.

**Foundation seed (or Basic seed):** Foundation seed, also known as a basic seed, is the descendent of the breeder seed and is produced under conditions that ensure maintaining genetic purity and identity. When foundation seed is produced by an individual or organization other than the plant breeder there must be a detailed and accurate description of the variety the foundation seed producer can use as a guide for eliminating impurities (“off types”) during production.

**Certified seed:** Certified seed is the descendent of breeder or foundation seed produced under conditions that ensure maintaining genetic purity and the identification of the variety that meets certain minimum standards for purity defined by law and certified by the designated seed certification agency.

**Quality Declared seed:** In 1993 the Food and Agriculture Organization of the United Nations (FAO) produced and published specific crop guidelines as Plant Production and Protection Paper No. 117 Quality Declared Seed – Technical guidelines on standards and procedures. The Quality Declared Seed (QDS) system is a seed-producer implemented system to produce seed that meets a minimum standard of quality but does not entail a formal inspection by the official seed certification system. The intent behind the QDS system is to provide farmers with the assurance of seed quality while reducing the inspection burden on government agencies responsible for seed certification. The QDS system is considered to be part of the formal seed system.

**Quality seed:** The phrase “quality seed” is at times used in place of certified seed or QDS to describe a quality-assured seed source, without specifying certified or QDS.

**Commercial seed:** Any class of seed acquired through purchase and used to plant farmers’ fields.

**Formal seed system:** The formal seed system is a deliberately constructed system that involves a chain of activities leading to genetically improved products: certified seeds of verified varieties. The chain starts with plant breeding or a variety of development program that includes a formal release and maintenance system. Guiding principles in the formal system are to maintain varietal identity and purity and to produce seeds of optimal physical, physiological, and sanitary quality. Certified seed marketing and distribution take place through a limited number of officially recognized seed outlets, usually for sale. The central premise of the formal system is that there is a clear distinction between “seed” and “grain.” This distinction is less clear in the informal system.

**Informal seed system:** The informal system, also referred to as a local seed system, is based on farmer-saved seeds. These systems are dominated by farmer-saved seed where farmers themselves produce, disseminate, and access seed directly from their harvest that otherwise would be sold as grain; through

exchange and barter among friends, neighbors, and relatives; and sale in rural grain markets. Varieties in the informal system may be variants of improved varieties originally sourced from the formal system or they may be landrace varieties developed over time through farmer selection. There is no emphasis on variety identity, genetic purity, or quality seed. The same general steps or processes take place in the local system as in the formal sector (variety choice, variety testing, introduction, seed multiplication, selection, dissemination, and storage) but they take place as integral parts of farmers' production systems rather than as discrete activities. While some farmers treat "seed" as special, there may be no distinction made between "seed" and "grain." The steps do not flow in a linear sequence and are not monitored or controlled by government policies, regulations, or inspections. Rather, they are guided by local technical knowledge and standards and by local social structures and norms.

**Improved versus landrace and local varieties:** Improved varieties are the product of formal breeding programs that undergo testing and are released through a formal process. A landrace is a local variety of domesticated plant species that have developed over time largely through adaptation to the natural and cultural environment in which it is found. It differs from an improved variety that has been selectively bred to conform to a particular standard of characteristics.

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<https://www.agrilinks.org/post/seed-system-definitions>