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*Shaping Lives...
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Center for Smart Agriculture

Organic Farming



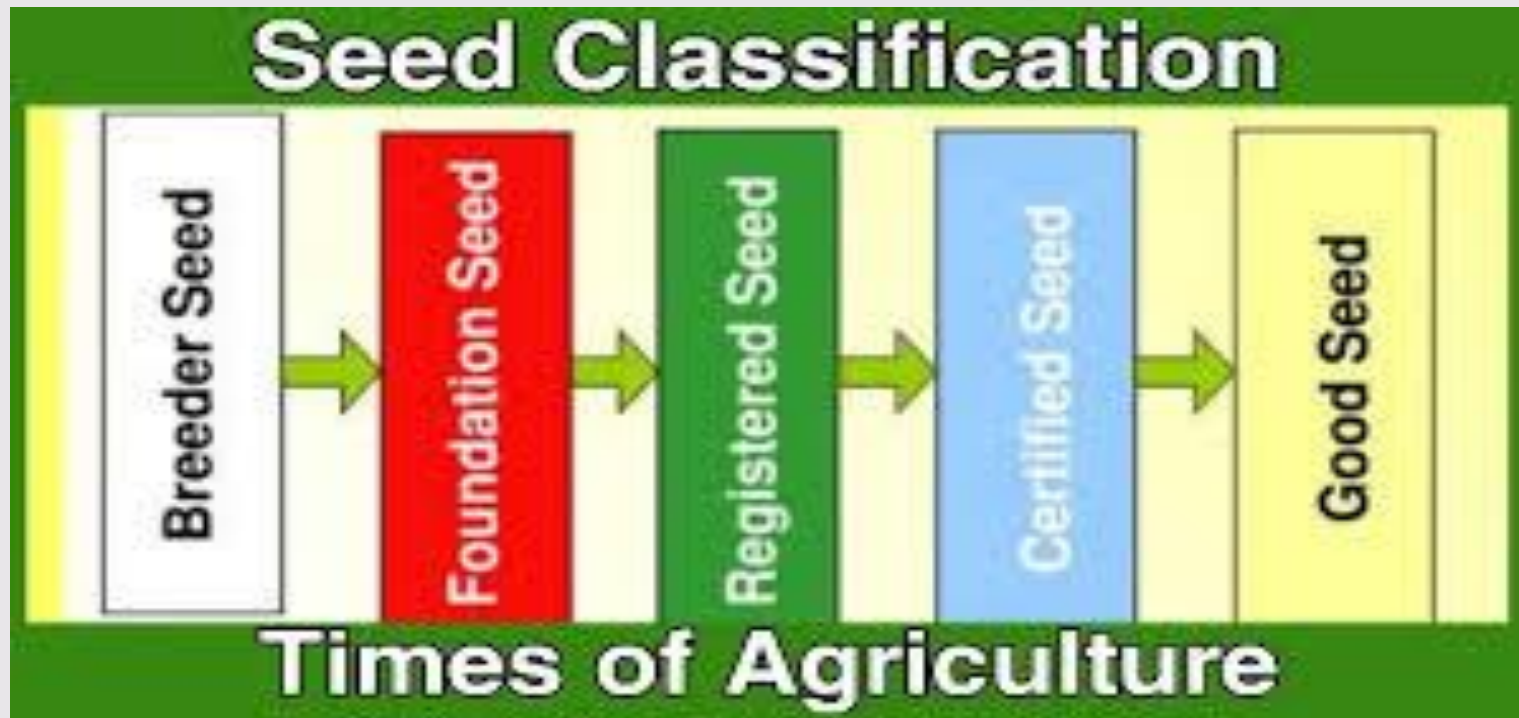
Module 6: Plant propagation

Session 4: Seed conservation and certification



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The Farming communities have always implemented conservation methods known to the formal sector as exsitu (off-field) and in-situ (in-field) conservation strategies.





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In-situ conservation provides farmers a valuable option for conserving crop biodiversity and helps to sustain evolutionary systems that are responsible for the generation of genetic variability



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This is especially significant in many parts of the world subject to drought and other stresses, because it is under such environmental extremes that variations useful for stress-resistance breeding are generated.



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Seed Certification

- Genetic purity in seed productions maintained through a system of seed certification. The main objective of seed certification is to make available seeds of good quality to farmers. To achieve this qualified and trained personnel from SCA carry out field inspections at appropriate stages of crop growth.
- They also make seed inspection by drawing samples from seed lots after processing.
- The SCA verifies for both filed and seed standards and the seed lot must confirm to get approval as certified seed.



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- It is a legally sanctioned system for quality control, seed multiplication and production and entails field inspection; pre and post control test and seed quality test to verify or check whether seed crop meets the minimum field and seed standard.
- In seed certification, field inspection is most important.
- The objectives are achieved by verifying the seed crop
 - Field meets the prescribed land requirement.
 - Seed used for raising seed crop is from approved source.
 - Provided with proper isolation or border rows in hybrid seed production.
 - Planting ratio in hybrid seed production is followed.
 - Properly rogued in confirmation with standard for different factors.



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Phases of certification

1. Receipt and scrutiny of application for seed production
2. Verification of seed source and Registration of sowing report
3. Field inspection
4. Seed processing and packing supervision
5. Seed sampling and analysis at lab
6. Grant of certificate and tag, tagging and sealing

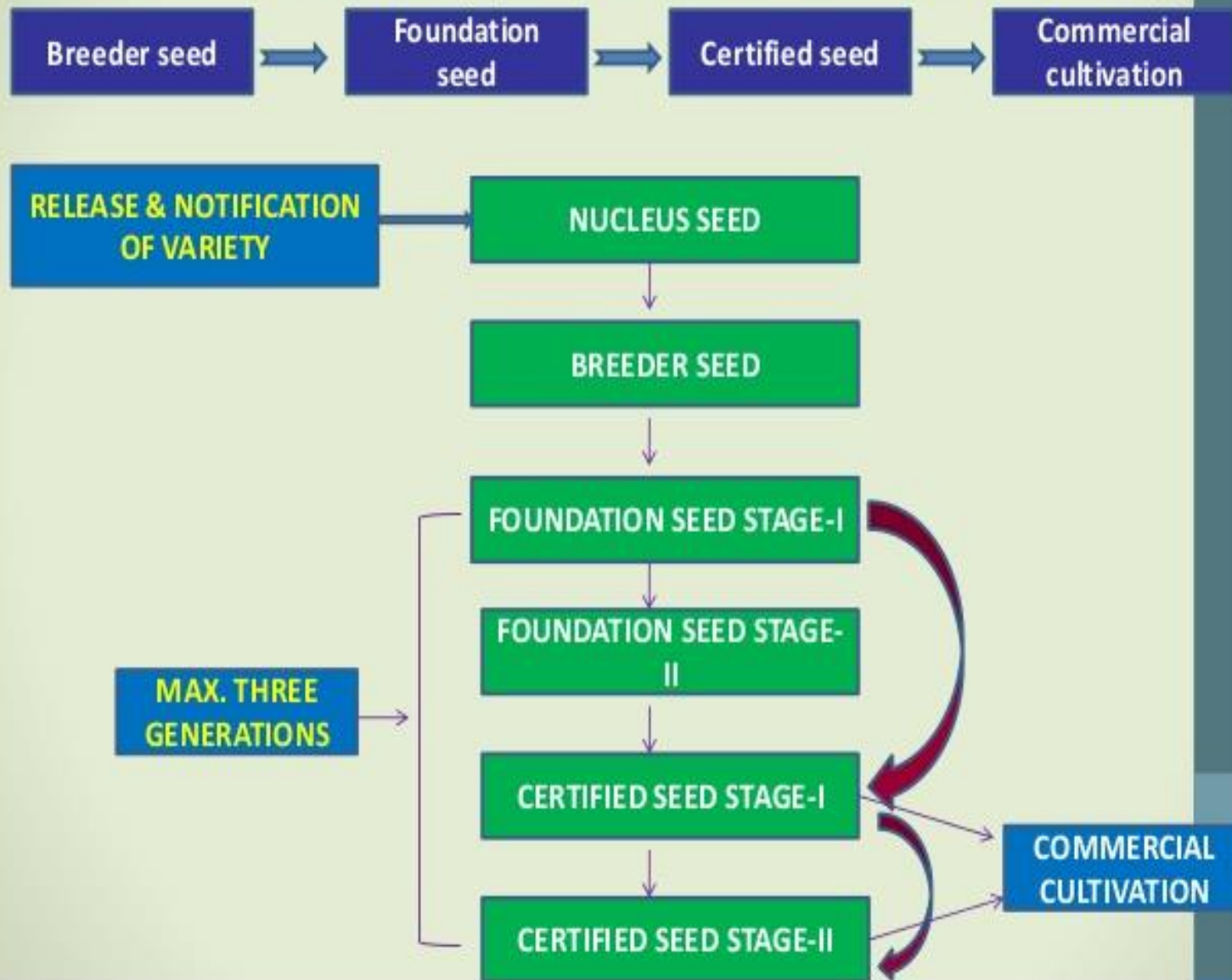




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Generation system of seed multiplication





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Pre-requisites for a successful seed certification programme

- (1) Sound crop improvement programmes for regular flow of stable, superior varieties of known pedigree
- (2) Well-qualified and trained staff to develop sound seed certification standards and procedures.
- (3) Infrastructure for efficient management of post-harvest processing of seed crop.
- (4) To have trained seed producers, arranging financial resources, marketing system enforcement responsibilities and constant liaison with related agencies.



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Seed certification procedures

- Eligibility of variety for certification
- Verification of seed source
- Verification of land requirements
- Field inspections

Seed testing against quality standards

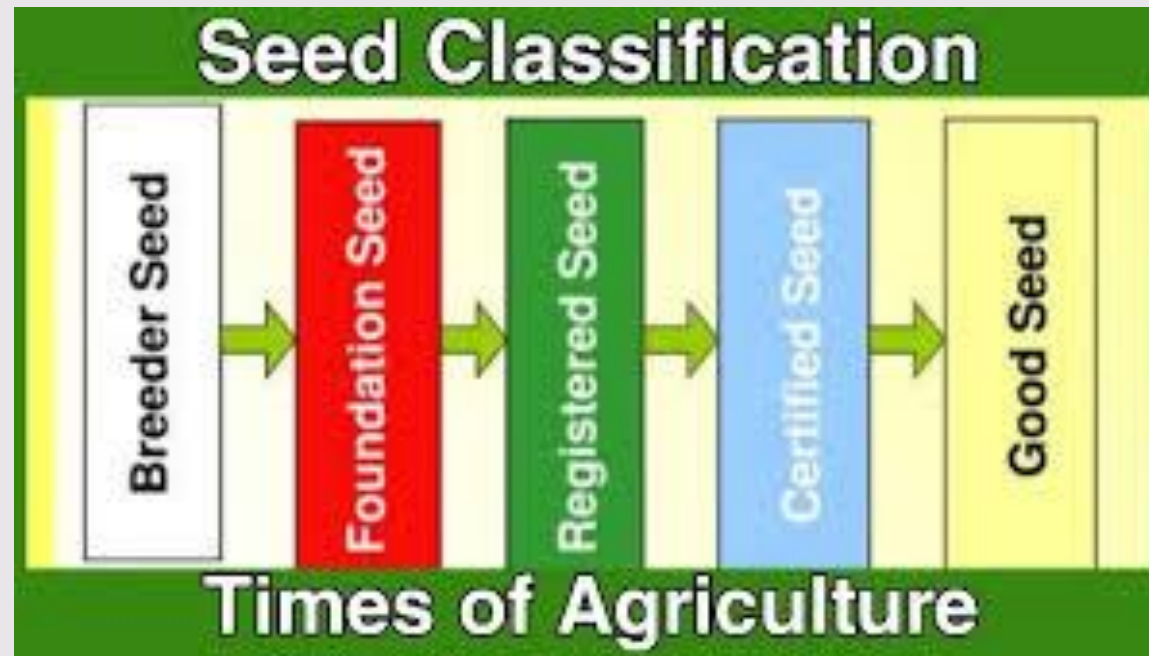
After the seed processing, seed sample is drawn with prescribed standards and tested in the seed testing laboratory to verify the different minimum seed certification standards for the important quality parameters.



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- Labeling: When a seed lot meets the minimum standards for a certain quality class, certification labels are put on every seed container.





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Validity Period of the Certificate

- The validity period of the seed lot will be nine months from the date of test at the time of initial certification. The validity period may be further extended for six months provided the seed conforms to the prescribed standards on retesting. A seed will be eligible for extension of the validity period as long as it conforms to the prescribed standards.



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THANK YOU