

Modernising cocoa production on Ghanaian farms

The 'Mabang Megakarya Selection Programme' (MMSP) is helping develop the next generation of seed garden stocks and is introducing advanced selection techniques to cocoa breeding in Ghana with the objective of selecting clones that:

- Yield well in the presence of Black Pod (*Phytophthora megakarya*);
- Are easy to propagate, establish and cultivate by farmers;
- Provide the same quality of finished cocoa as Ghana currently produces.

An opportunity to **participate** in a **public / private** partnership

Many years of commitment, sustained research effort and investment will be required to identify and recommend clones of the highest quality required by the Ghanaian farmers and the consumers of the cocoa beans they produce.

Cocobod / CRIG, GCGRA and CRUK are committed to continuing to work together and to seek further international support for MMSP and the seed garden programme.

MMSP

Mabang Megakarya
Selection Programme



The MMSP Technical Plan

- Green field site (219 Ha) in an area with a high incidence of black pod infection due to *P. megakarya*;
- Excellent facilities, including a world class nursery, for developing improved planting material for Ghana and the Region;
- A unique partnership between CRIG, Cocobod, chocolate industry and farmers;
- Employment and development opportunities for Mabang Villagers;
- Four year Establishment Phase initiated September 2005;
- Identifying pollen parents for Ghana's next generation seed gardens;
- Over 1500 clones already established in preliminary trials, with 500 new clones added annually;
- Focus is on establishment ability, vigour, growth habit and adaptation to planting density, initial yield, Ghanaian cocoa quality and initial reaction to *P. megakarya*;
- Protecting West Africa from catastrophic disease by increasing the genetic diversity of tree stocks and selecting types with molecular markers for resistance to non-endemic diseases, such as Witches' Broom.

The supply of improved planting materials to farmers is a vital component in ensuring the sustainability of cocoa production



A new cocoa breeding initiative to improve the seed gardens of today and develop the clones of tomorrow



For further details on MMSP contact:

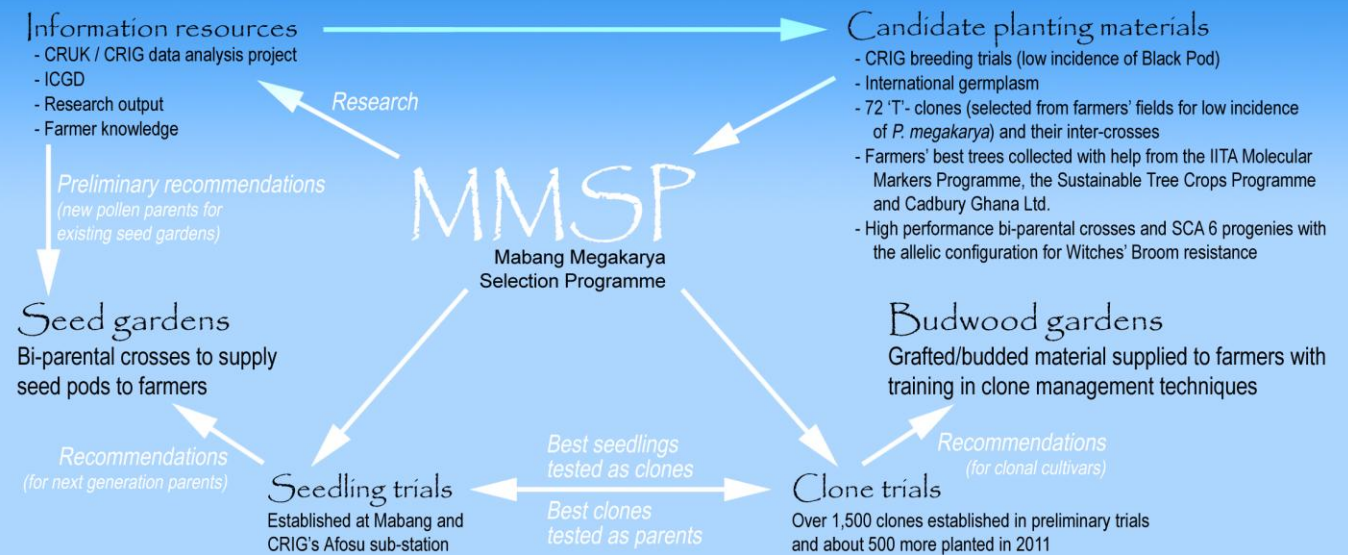
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A **public / private** partnership
towards **sustainable** production
of **cocoa** in Ghana

Since this form of the disease cannot be controlled **economically** with fungicide sprays or other cultural techniques, there is an urgent need to develop **new varieties** with greatly reduced disease incidence.”

MMSP Establishment Phase
Final Report to LNV (2010)



MMSP will provide Ghana's seed gardens with superior parents and develop the clones of the future



* initial co-funding was provided by the Govt. of the Netherlands with additional support from the Ghana Cocoa Board (Cocobod)

The short term benefit of MMSP will be improvement of the output of Ghana's existing and planned seed gardens through use of superior pollen parents. In the longer term, trials already underway will lead to identification of the clonal cultivars which will be a key step in the modernisation of cocoa farming.

“The involvement of farmers and industry throughout will ensure that the clones developed will have the desired agronomic characteristics and produce fermented and dried beans that are acceptable as Ghanaian cocoa.”

Cocoa Research (UK) was established in 1996 to promote UK based research on cocoa which will benefit the cocoa community as a whole. CRUK is managed by representatives of the UK chocolate industry, cocoa trade and Defra (UK Department for environment, food and rural affairs).