

The Mabang Megakarya
Selection Programme (MMSP)

The development and supply of new planting materials that can sustainably produce high yields of good “Ghanaian quality” cocoa, even under heavy disease pressure, will help to improve farm incomes and contribute to the modernisation of cocoa production.

With over 400,000 farm families depending directly on cocoa for their livelihoods in Ghana, and with even more Ghanaians making their living indirectly from the crop, the outputs from MMSP stand to make an important contribution to poverty alleviation and the development of the cocoa sector in the country over the longer term.



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

An opportunity to participate in a
public / private partnership

In 2005, CRIG and GCGRA agreed to establish a new joint venture to develop MMSP as a practical breeding programme with support from the Government of the Netherlands. A new four year phase was initiated in 2013 with continuing support from COCOBOD, the Netherlands and GCGRA, along with new partners from the industry.

MMSP builds on the research underway at CRIG and links to COCOBOD’s network of seed gardens to provide Ghana’s cocoa farmers with access to the high performance planting materials they will need to increase their incomes while facing the challenges due to diseases and a changing climate.

Limited access to improved planting materials is one of the major contributing factors to the current unsustainability of the business model of many cocoa farmers.

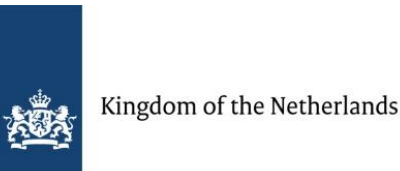
► World Cocoa Conference
(Abidjan, 2012)



MMSP

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

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



Many years of commitment, sustained research effort and investment are required to develop and produce these superior planting materials. MMSP welcomes interest from new partners who would like to be part of this important initiative as it enters its second decade.



Or visit us online

Contact us about becoming a partner:

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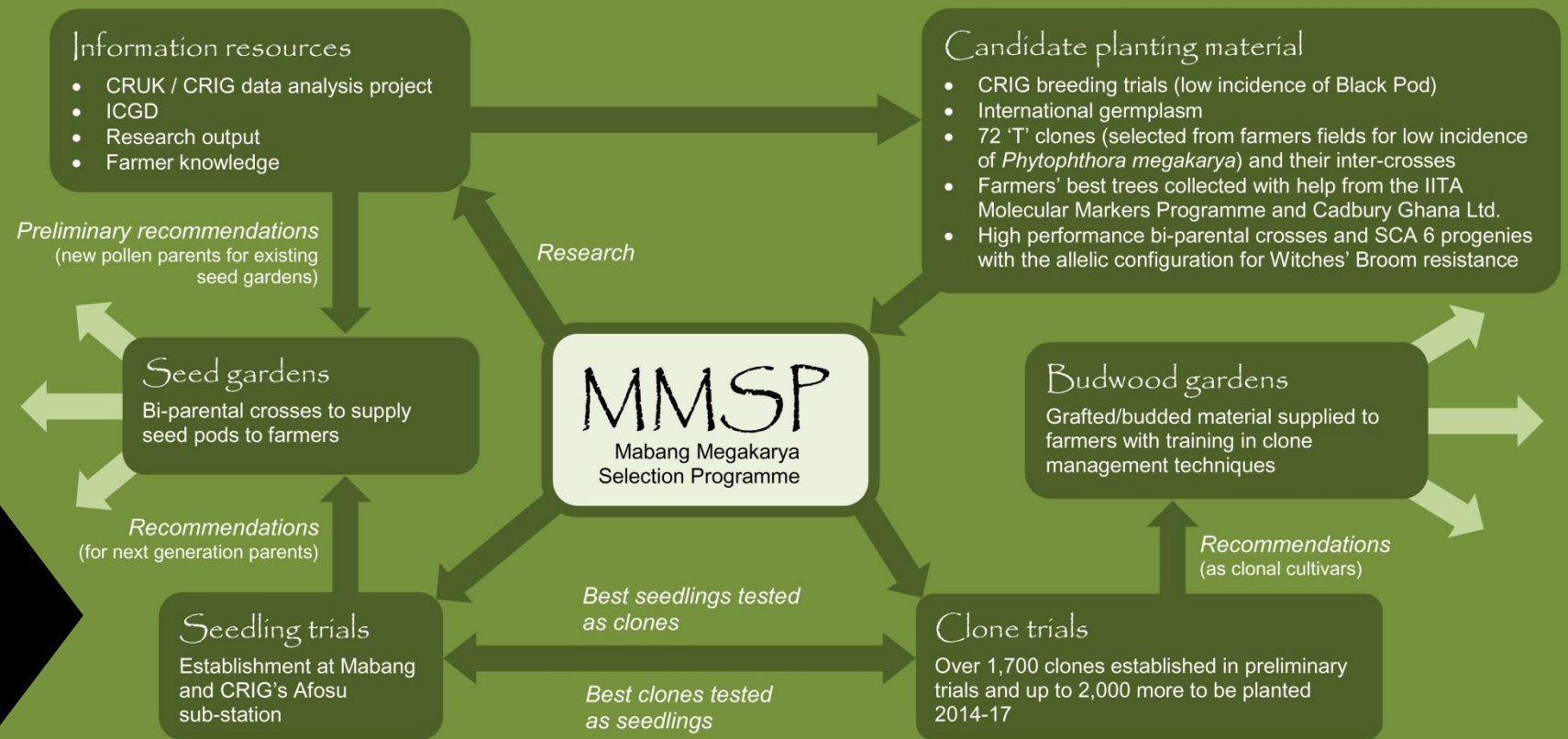
“ Cocoa producing regions in **West Africa** are facing a devastating form of black pod disease, *Phytophthora megakarya*, which threatens the profitability of the long-term future of **cocoa production** in these areas.

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. ”

► Lockwood, G. & Nsiah, E.
(MMSP Establishment Phase
Final Report to LNV; 2010)

MMSP was initiated in 2005 to introduce an advanced, large-scale breeding approach to developing planting materials in Ghana that would produce high yields of good quality cocoa even under heavy pressure from *Phytophthora megakarya* and other pests and pathogens.

Building on past breeding efforts to provide for the current needs of the farmer and industry while developing the future planting material necessary for long-term, sustainable cocoa production in Ghana



The MMSP Technical Plan:

- Large green field site (219 ha) in an area with a high incidence of *Phytophthora megakarya* black pod disease;
- Over 64 ha of trials already established, including more than 1700 clones, with 500 new clones added annually;
- Excellent facilities, including a world class nursery for producing clonal planting material for trials;
- Construction of a fermentary and staff trained to ensure that cocoa samples from the site can be uniformly post-harvest processed ready for quality/flavour analysis;
- Introduction of barcode technology and staff training to further improve data management and analysis;
- Focus is on establishment ability, vigour, growth habit, reaction to *Phytophthora megakarya*, yield and quality.

The **first impact** of MMSP will be an improvement in the output of Ghana's existing and planned seed gardens through the use of **superior pollen parents**. In the longer term, trials already underway will lead to new **clonal cultivars** being identified that 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 of **high quality** 'Ghanaian' cocoa.

MMSP also has a **positive social impact**, giving employment and training opportunities to hundreds of people from the **local community**, with a multiplier effect on the **rural economy** of the Mabang area.

