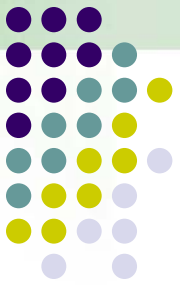


GCP ARM 2009 Bamako



Marker and Genotyping Support Services

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Bridging the technology GAP in the use of molecular markers



Plant breeding is undergoing the **fastest rate** of progress in history thanks to improved technologies: **markers, informatics, statistics, e-communications, etc...**

- Developing countries **lag behind** due to lack of access to the right technology
- A GCP goal is **improving access** to the technology **in the developing world**

The characteristics of the GAP



What is missing?

- Knowledge of the technology, from poor to excellent
- From zero to reasonable lab facilities
- Inadequate funding
- Poor institutional support
- Inability to negotiate and contract service labs
 - Internal policies prevent use of this alternative
 - Local laws make it difficult to obtain authorization
 - Scientists do not know/have no time to engage in contracting arrangements and follow up
- Plus a **LARGE** and **COMPLEX** list of **VARIED** issues

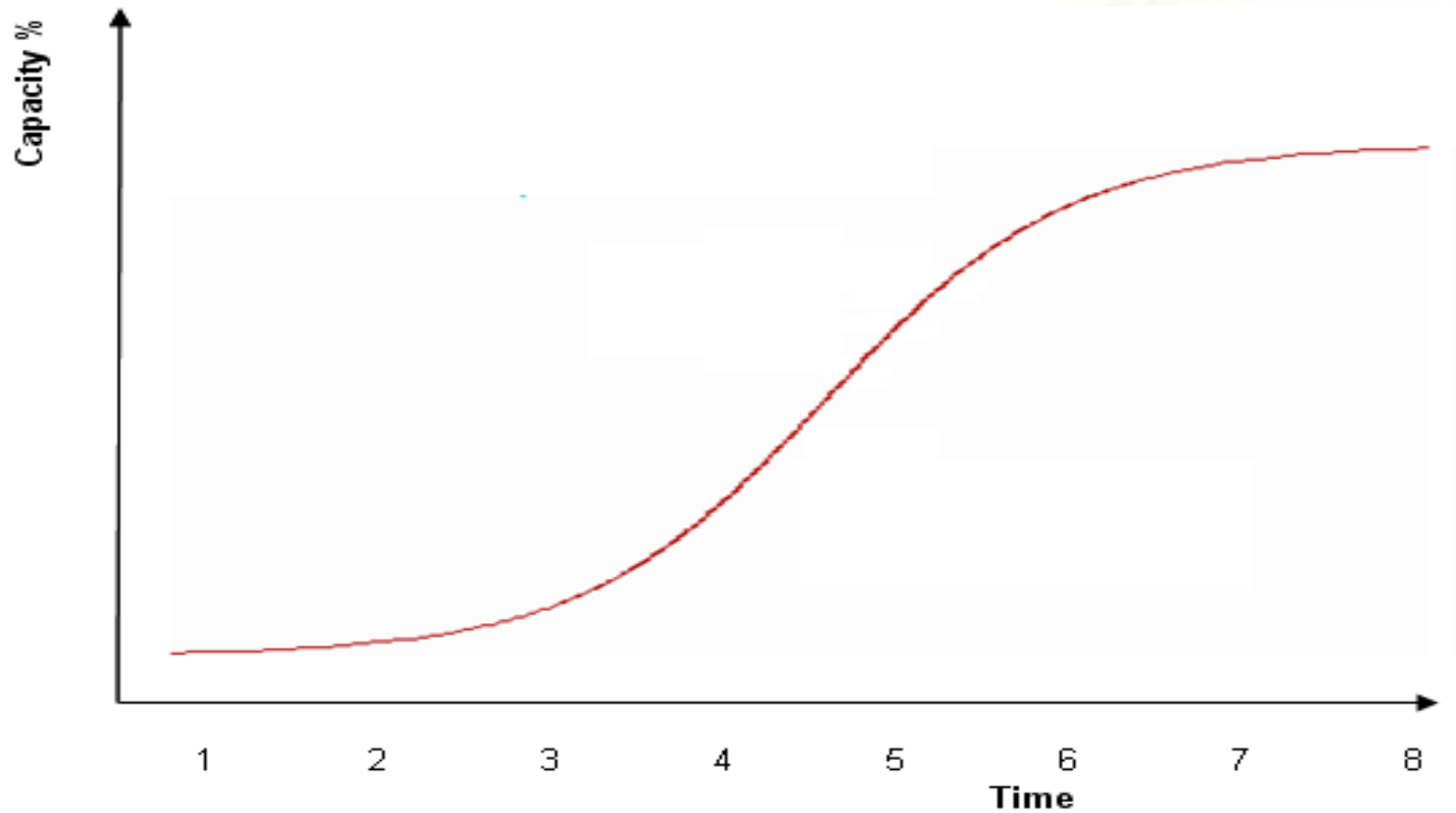
GSS: the 1st innovative solution to bridge the gap



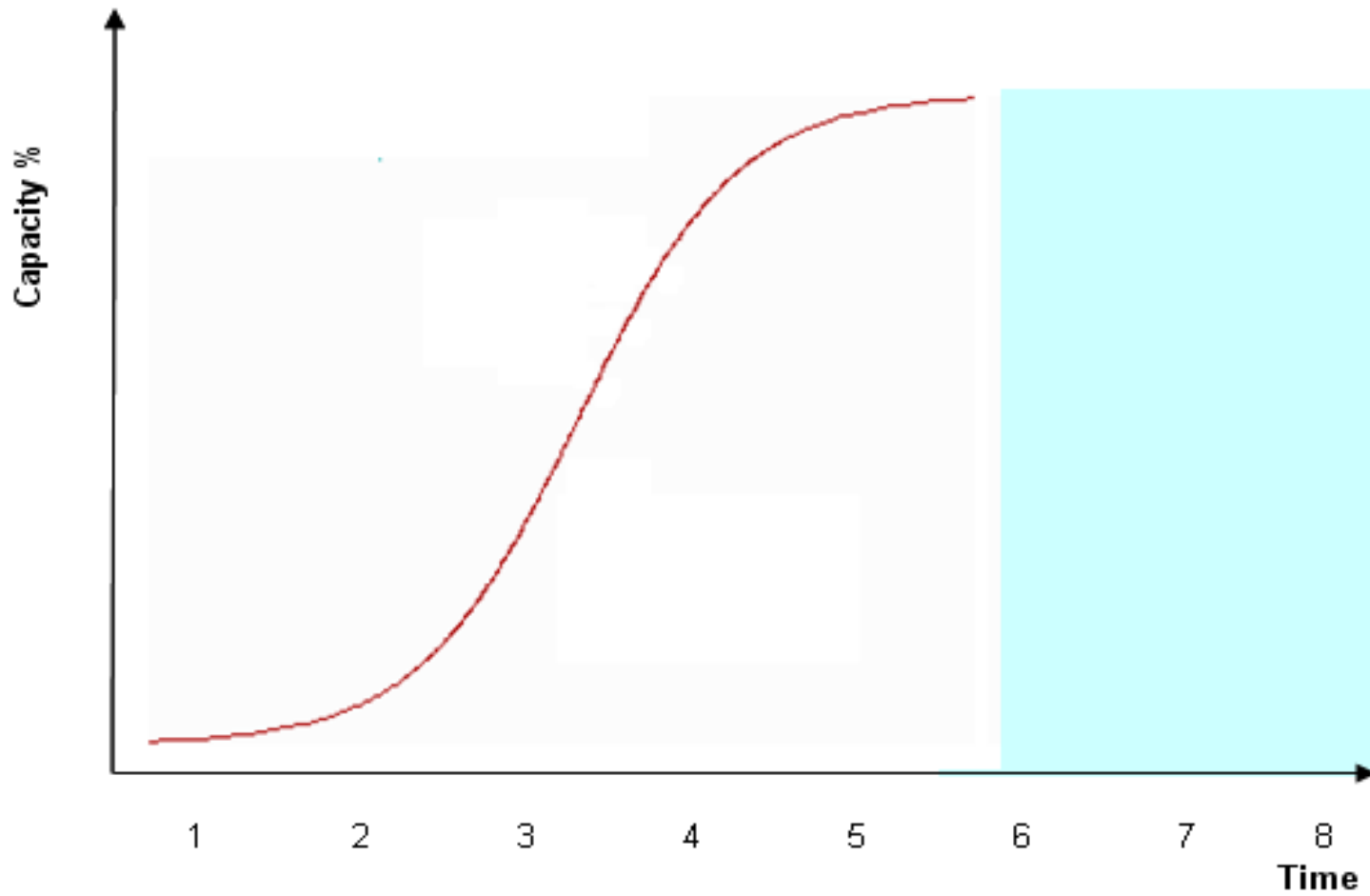
In 2006, GCP launched a service for ...

- **Breeding Programs** and **Germplasm Scientists** in developing countries
- Providing access to marker technologies by **hiring** genotyping work from cost effective laboratories
- Relieving the scientists from the administrative and financial hassles
- Offering training in statistics (**WUR**) to beneficiaries to assure
 - the correct **interpretation** of the data and
 - a good **implementation** plan (**GEERTS**)

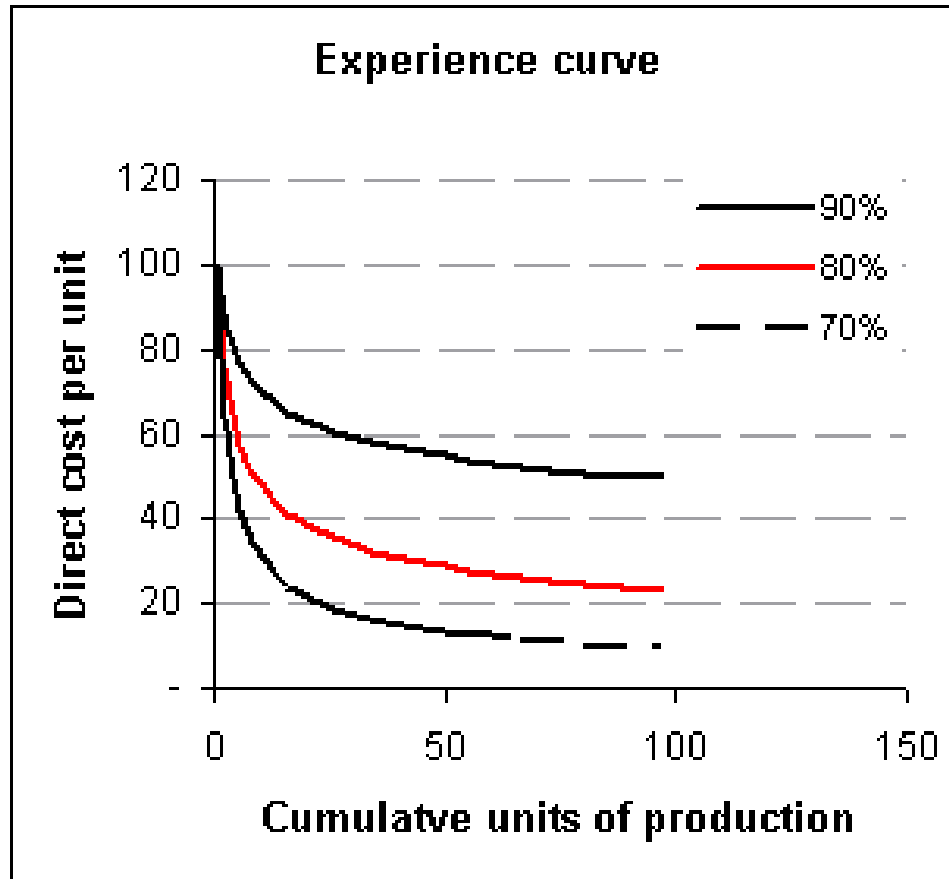
GSS takes the learning curve and ...



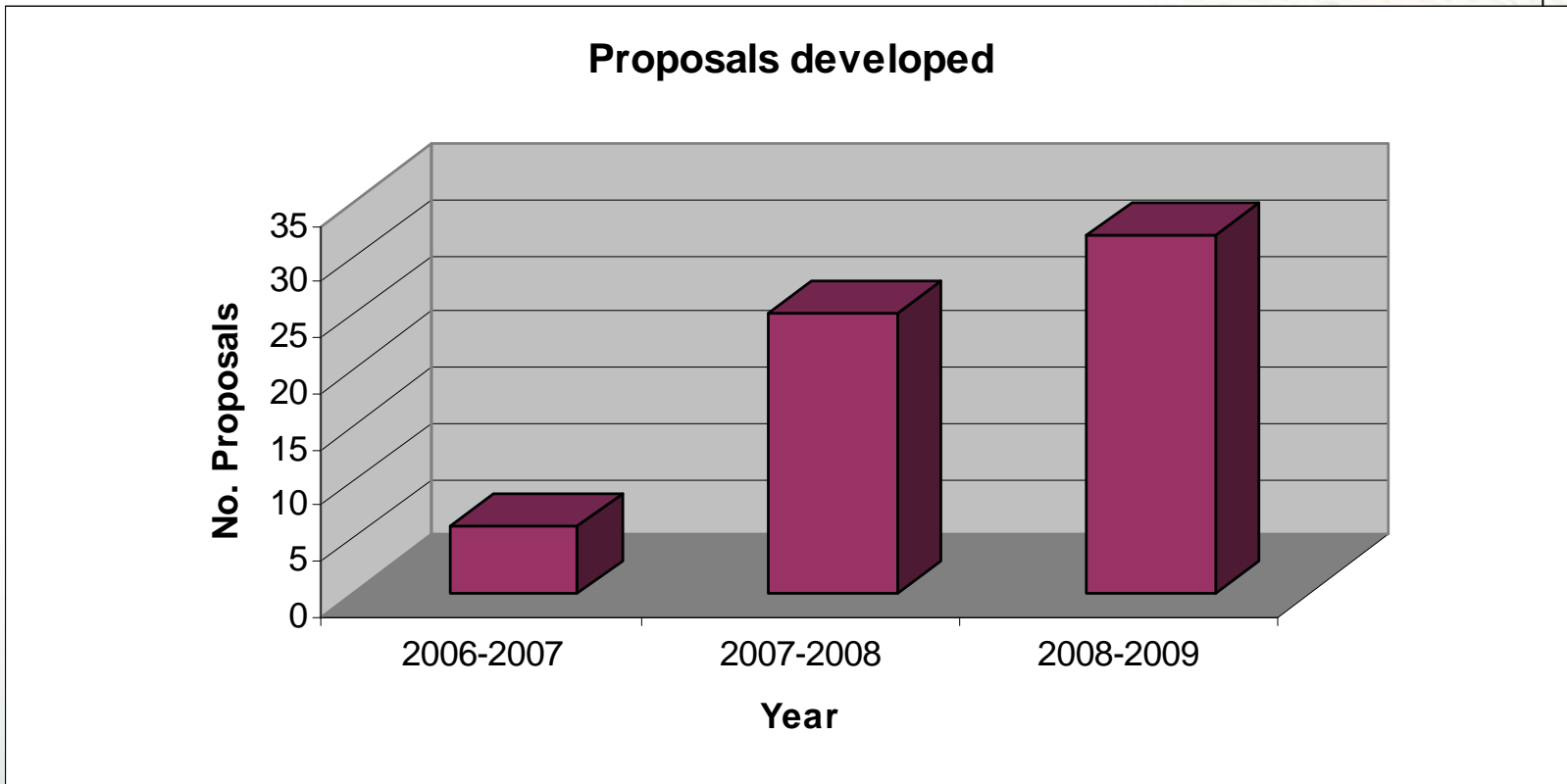
Turns it into this ...



Achieving these gains ...



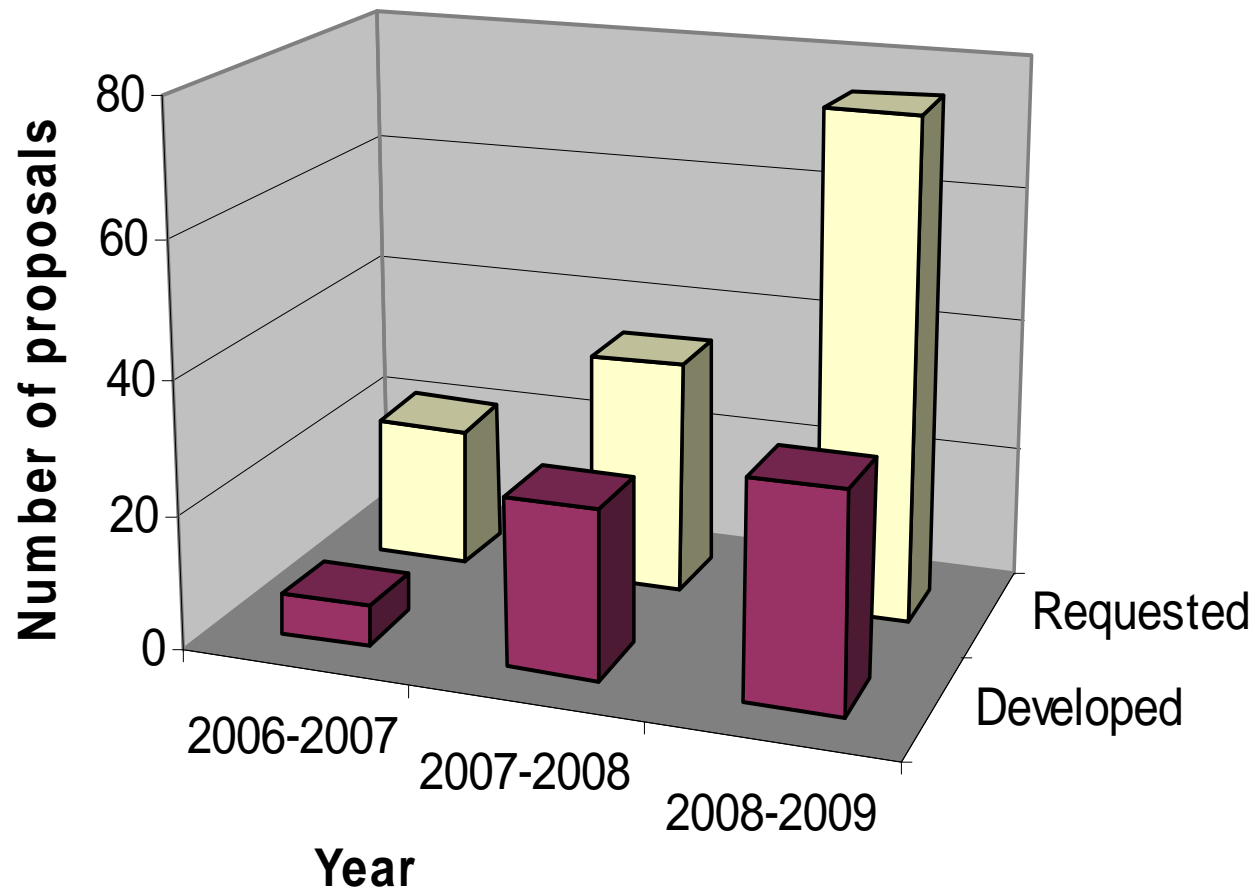
GSS performance (1)



GSS performance (2)



Requested vs. Developed



Characteristics of the GSS

- **Little room** for uncertainty
- **Fit** pre-determined goals
- **Immediate** impact !
 - Building capacity
 - Improving cost efficiency
 - Reducing product development time
 - Opening new opportunities
- Support and motivation of '*champions*' in developing regions
- Paving the way for GCP products already in the pipe line

Is the GSS doing well in all fronts?



Good at:

- Addressing technical needs
- Creating capacity
- Managing the administrative process
- Perform with high financial efficiency

Poor at:

- Responding to expected timing
- Funding as much genotyping as needed
- Accessing markers for the different needs

The Marker Services of the MBP: the 2nd innovative approach to reduce the gap



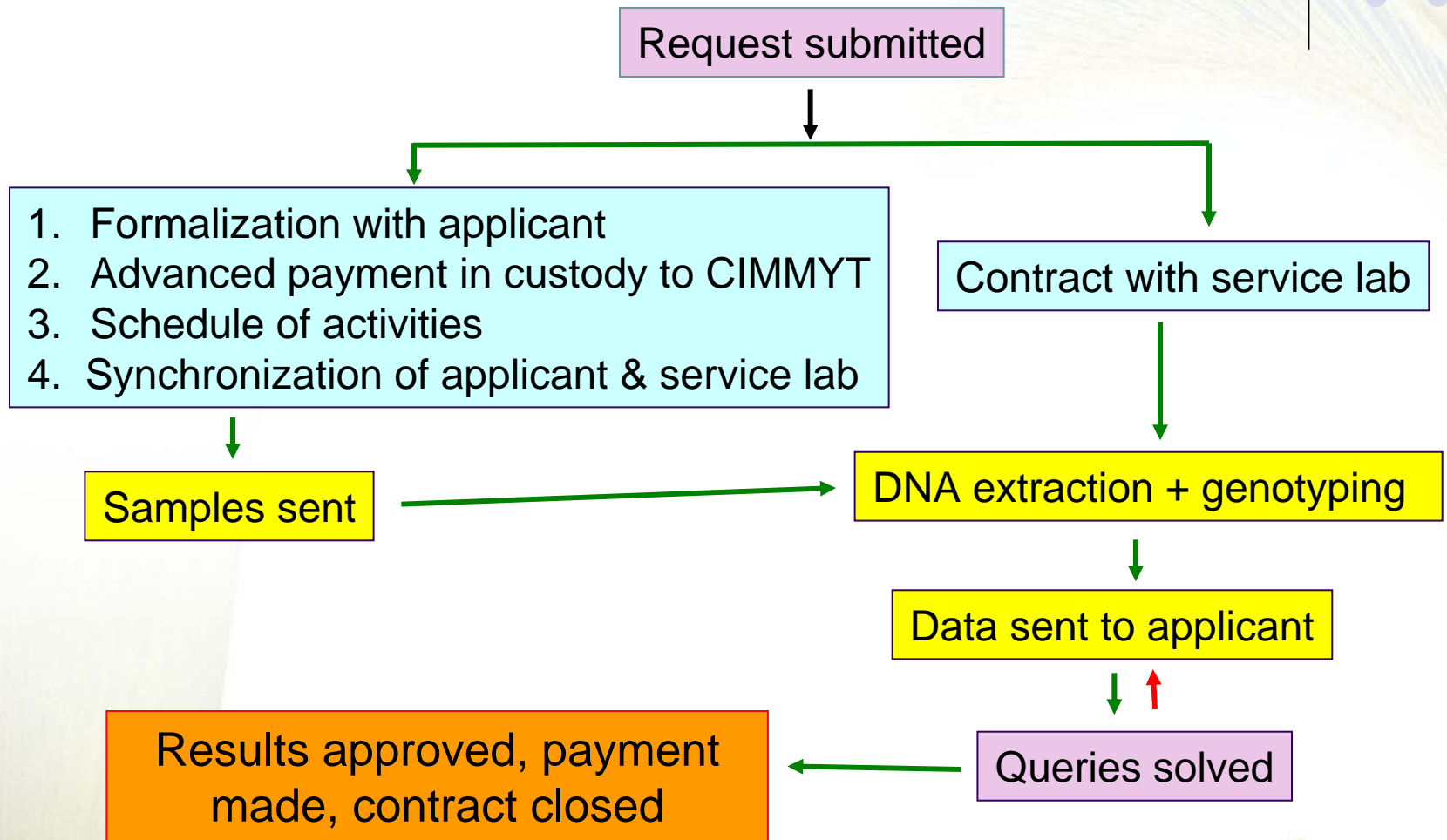
	GSS	MS
Access	By open calls only	At any time
Clientele	Developing countries	Any one
Crops	Selected list	Unlimited
No. of samples	Limited	Unlimited
Funding	Full support	None
Statistics Support	Yes	On demand
Turn around time	From slow to very slow	Fast

Getting MS on the road ...



- Two trials (cowpea, maize) are ongoing with two genotyping labs (**DNA Landmarks, Bioscience, UK**) for sample submission, DNA extraction and genotyping output
 - Final results expected **next week!**
- After these, MS may start operating
- A few projects are on the waiting line

MS starting workflow diagram



New GSS call coming soon!

- A call for proposals will be announced **shortly**
- Proposals will be developed in **2010**
- The **Crop Diversity Trust** for the second time will join us in the announcement