Global Partnership Programme:

Trypanosomosis Control
Global Partnership Programme
Genetic Resource Management and Biotechnology

GFAR

Trypanosomosis Control

Global Partnership Programme
A Global Initiative to exploit biotechnology and animal genetic resources for the improvement of livestock productivity through control of trypanosomosis.

5 years

Increase productivity through integrated control of trypanosomes
Poverty alleviation
Improved food security

Trypanosomosis is a major constraint to livestock productivity in Africa, Asia and Latin America. Economic losses are estimated at $4 billion annually in Africa and 300,000 new cases of human sleeping sickness each year.
HISTORY of GLOBAL INITIATIVE (1/2)

November 1999: CIRAD-EMVT proposed a Global Initiative on Tryps

December 1999: discussions with ILRI

January 2000: joint meeting CIRAD-ILRI in France.
Participants: PAAT, ICTPV
OIE NTTAT
GFAR secretariat
IRD, University of Montpellier
Discussion and preparation of Proposal.

March 2000: Proposal sent to every institution, scientist working on tryps in
Africa (PAAT)
Asia (ILRI)
Latin America (Trytplink)

April 2000: more than 50 positive answers

May 2000: Presentation of the Global Proposal to GFAR at Dresden by Dr Adama TRAORE (CORAF). Very positive welcome.

October 2000: framework for proposals by GFAR Secretariat

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HISTORY of GLOBAL INITIATIVE (2/2)

2001: Stand-by
What to do? How?

January 2002: Questionnaire to partners
  Current status of research activities
  * Current projects
  * Future projects

March 2002: Analysis of questionnaires

May 2002: Presentation of proposal to EFARD

FUTURE of GLOBAL INITIATIVE

PAAT meeting at ILRI (Kenya) with African partners +
representatives from Latin America and Asia
to build a Project.

Next step: meeting with donors ...

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**ACTIVITIES**

1. **Strategic research using modern tools of biotechnology and genetics.**
   - Develop novel vaccines: anti-disease, anti-parasite
   - Better use of trypanotolerant animals
   - Develop and apply affordable, specific & rapid diagnostic tests

2. **Develop sustainable decision-support tools** for integrated control
   - Better use of chemotherapy (cost/benefit)
   - Improve the control of parasites in livestock and human populations
   - Develop decision support tools based on risk assessment

3. **Capacity building**
MAIN INNOVATIONS

- **Link** the experience and research agendas of scientists & institutions from Africa, Asia and Latin America.

- **Integrate research on the parasites** of economical importance:
  - *Trypanosoma congolense*: livestock / Africa
  - *T. vivax*: livestock / Africa / America
  - *T. brucei*: livestock / man / Africa
  - *T. evansi*: livestock / Africa / Asia / America

- **Integrate research products** on diagnostic, epidemiology, chemotherapy, immunology, vaccines and resistant animals...

- **Improve** human welfare with **most advanced tools of biotechnology and basic research outputs**.

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PAAT / GFAR

PAAT: Programme Against African Trypanosomosis

Proposed by FAO to:

- “promote and facilitate integrated and effective control of trypanosomosis”
- within the overall goal of a “sustainable increase of income, food security and human welfare in trypanosomosis affected areas of Africa”.

But limited available resources

GFAR: Global Forum on Agricultural Research

Provide support required to initiate, strengthen and sustain essential research activities at national and regional levels.

PAAT as a basis for an extended global initiative in developing countries of South America and Asia

GFAR as providing research support to PAAT

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RESULTS & IMPACT

Main expected results:
- Farming as a more sustainable, economically viable and environmentally friendly activity.
- A community of research institutions, private sector, national and international agencies.
- Strategic research / biomedical research for solutions including diagnostic tests, vaccines and improved use of animal genetics.

Proposed impact assessment methodology:
- Birth / death rate in endemic areas
- Voluntary disposal of surplus stock
- Age / sex distribution of animals / herds
- Number and type of plough animals used
- Quantity of trypanocides sold
- Epidemiological surveys
- Global increase of animal production
GUIDING PRINCIPLES FOR MANAGING GPP

1-3 leaders

Flexible organization: new partners to enter at any time

Steering Committee with rotation of members

Small and lean Executive Secretariat:

- Information and Communication between partners and outside
- Priority setting: research priorities
- Donor relations: common rule = cost-sharing
- Public awareness: cost / benefits
- Monitoring of activities
- Valorisation and wide dissemination of results

Global Partnership Programme
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N.B.: Category: NARS, ARI, IARC, NGO, FO, PS, Donor
CONCLUSION.

Need for **new tools** to alleviate trypanosomes-induced constraints to:

- Produce novel vaccines
- Produce new diagnostics
- Disseminate resistant animals

These new tools will be associated to **existing methods**:

- Chemotherapy
- Vectors control

The proposed Forum will create a **synergy between different groups** involved in basic and applied research.