
EU – AFRICA S&T Co-operation through Framework Programmes: Examples of Success Stories

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Science and Technology-Europe Africa Project

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Brief Overview of Framework Programmes

1. **Framework Programmes (FPs) have been the main financial tools through which the European Union supports research and development activities covering almost all scientific disciplines. Implemented since 1984.**
2. **FPs are designed to support the implementation of EU treaties and development strategies.**



Brief Overview of Framework Programmes

FP Milestones

1984 – 1987	First Framework Programme	(STD)
1987	Single European Act – Science becomes a Community responsibility	
1987 – 1991	Second Framework Programme	(STD)
1990 – 1994	Third Framework Programme	(STD)
1993	Treaty of the European Union – Towards Enlargement	
1994 – 1998	Fourth Framework Programme	(INCO)
1998 – 2002	Fifth Framework Programme	(INCO)
2000	European Research Area (ERA)	
2002 – 2006	Sixth Framework Programme	(INCO)
2007 – 2013	Seventh Framework Programme	



The Seventh Framework Programme (FP7)

- FP7 builds upon previous FPs.

- Aims:
 - Creating the **European Research Area**.
 - Accelerate the transformation from a resource-based to a knowledge-based economy (**Lisbon Strategy for Development**).
 - Runs in parallel and in co-operation with the **European Technology Platforms (ETP)** and the **Joint Technology Initiatives (JTI)**



The Seventh Framework Programme (FP7)

STRUCTURE OF FP7

<p>COOPERATION (Cooperation between industry and academia in key technology areas)</p>	<p>Health</p>	<p>IDEAS (Support for frontier research)</p>	<p>European Research Council</p>
	<p>Food, agriculture and biotechnology</p>	<p>PEOPLE (Support for mobility and career development of researchers)</p>	<p>Initial training</p>
	<p>Information and communication technologies</p>		<p>Life-long training</p>
	<p>Nanosciences, nanotechnologies, materials and new production technologies</p>		<p>Industry-academia</p>
	<p>Energy</p>	<p>CAPACITIES (Enhance research and innovation capacities)</p>	<p>International dimension</p>
	<p>Environment (including climate change)</p>		<p>Specific actions</p>
	<p>Transport (including aeronautics)</p>		<p>Research infrastructures</p>
	<p>Socio-economic sciences and the humanities</p>		<p>Research for the benefit of SMEs</p>
	<p>Space</p>		<p>Regions of Knowledge</p>
	<p>Security</p>		<p>Research potential</p>
	<p>General Activities (Annex IV)</p>		<p>Science in society</p>
			<p>Coherent development of research policies</p>
		<p>International co-operation</p>	
	<p>JRC Non-nuclear actions by the Joint Research Centre</p>		
<p>Euratom indirect actions (Civil nuclear actions by the European Atomic Energy Community)</p>	<p>Fusion</p>	<p>Euratom direct actions by the Joint Research Centre</p>	
	<p>Fission</p>		

The Seventh Framework Programme (FP7)

Funding Schemes

- **Collaborative Projects**
 - Networks of Excellence
 - Large-scale Integrating collaborative projects
 - Small or medium-scale focused research project
 - Collaborative projects targeted to SMEs
- **Specific International Co-operation Actions (SICA)**
 - Participation involving (Non-EU) Third Countries
- **Coordination or Support Actions (CSA)**
 - Co-ordination Actions - Policy-oriented
 - Support actions - Dissemination/Application oriented



The Seventh Framework Programme (FP7)

Proposal Process

Proposal Stage	Main Actors
Work Programme	Programme Committee
Proposal preparation and submission	Participants
Evaluation	Independent experts
Selection	Programme Committee
Negotiation	Commission services
Contract	Consortium



The Seventh Framework Programme (FP7)

- **Participants:**
 - ❑ **Legal persons**
 - ❑ **SMEs**
 - ❑ **Research organizations**
 - ❑ **Educational institutions**
 - ❑ **Public bodies**
 - ❑ **Undertakings**
 - ❑ **Associations**
 - ❑ **International organizations**



The Seventh Framework Programme (FP7)

Partnering

Origin of partner	% in consortia
Previous partners	49
Other consortium members	23
Third parties	9
At meetings	13
Other	6



The Traditional Fermented African Foods Programme

- **Brief History:**
 - ❑ **To build capability for research and quality assurance in traditional African fermented foods.**
 - ❑ **Initiated in 1990 by WAITRO and KVL**
 - ❑ **Funded by DANIDA for its programme countries in West Africa.**
 - ❑ **From 1994 extended to other African countries through Framework projects.**
 - ❑ **6 framework projects completed**



The Traditional Fermented African Foods Programme

- **Basic structure of the projects:**
 - **Project components:**
 - **Microbiology and fermentation studies**
Isolation and pheno-typing of predominant microorganisms by Ph.D and M.Sc students in local labs.

Advanced microbiological work including geno-typing and screening for desired properties of the organisms in co-operation with EU partners in the European labs.



The Traditional Fermented African Foods Programme

- **Laboratory management**
 - Upgrading or establishment of new laboratory facilities in the African partner institutions.
 - Training of researchers and technicians in basic principles of GLP.

- **Quality Assurance**

Training of partners and local producers in the principles of hygienic food production according to GMP and HACCP.

- **Business Development and Entrepreneurship Training**

To enable local project beneficiaries to properly apply the results of the research and help disseminate the technologies developed.



The Traditional Fermented African Foods Programme

■ Completed Projects:

- **Capability building for research and development in quality assurance and fermentation technology for African fermented foods (1994- 1998)**
 - Partners: WAITRO, DK, D, GH, BF, NIG, TZ, KEN, ZIM

- **Capability building for research and development in traditional fermented African dairy products (1996 – 2000)**
 - Partners: WAITRO, DK, D, ETH, UG, SUD

- **Biological degradation of aflatoxin A in fermented maize and sorghum products (1998 – 2002)**
 - Partners: WAITRO, DK, D, GH, NIG, RSA



The Traditional Fermented African Foods Programme

- **Completed Projects:**
 - **An integrated approach to prevent OTA contamination in post-harvest processing of coffee in East Africa (2001 – 2004)**
 - Partners: WAITRO, DK, D, ETH, KEN, TZ
 - **Improving the quality and nutritional status of "Gari through the use of starter cultures and fortification with soybean, palm oil and coconut milk ((2002 – 2007)**
 - Partners: DK, D, BEL, BEN, KEN, RSA
 - **Developing biochemical and molecular markers for determining quality assurance in the primary processing of cocoa in West Africa (2002 – 2007)**
 - Partners: DK, D, GH, NIG, CIV



The Traditional Fermented African Foods Programme

■ Completed Projects:

- **International Seminars on Traditional African Fermented Foods (1992 – present)**
 - Held every 2 years to share information on research results and establish new areas for collaboration.
 - The seminars have been funded by the various EU projects, DANIDA and other donors.
 - The 7th seminar was held in May 2006 in Cotonou.



Successes and Challenges

- *Successes:*
 - Capacity building –
 - Improved infrastructure (laboratories)
 - Ph.D. and M.Sc. degrees
 - Training of laboratory technicians,
 - Training of local food processors
 - Networking among African food scientists
 - Publications in reputable international journals
 - Improved linkages with local industry



Successes and Challenges

- *Challenges:*
 - ❑ Sustainability – Not enough critical mass built within all participating institutions
 - ❑ Lack of national co-funding to match contribution from EU
 - ❑ Slow uptake of project results by local enterprises
 - ❑ Insufficient evolution of national programmes and food laws to progress implementation of project results



The Way Forward

- ❑ Increasing the role of Universities and Ministries in EU-Africa S&T Cooperation
- ❑ Research institutions being proactive in building local capacity
- ❑ Increasing support for local capacity building through CSAs in framework programmes

