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The Participation of the National Technological Centre in the Technical Cooperation Program Activities

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REPUBLIC OF ANGOLA
MINISTRY OF SCIENCE AND TECHNOLOGY
NATIONAL TECHNOLOGICAL CENTRE

Frontal View CTN

The National Technologycal Center CTN

- with headquarter in Luanda, is a public institution tutored by the Ministry of Science and Technology, in charge to realize applied scientific research.

Cooperation

The Technical Cooperation program is the main vehicle through which the IAEA assists countries in using nuclear science and technology for peaceful purposes and facilitates the transfer of such technology and knowledge in support of their development goals

The program offers networking, knowledge sharing and partnership facilitation, delivered through fellowships, scientific visits, meetings and workshops, the provision of expert advice and the procurement of equipment.

Our Goal

To inform the success of participation of **National Technological Centre** in the activities of the cooperation between Angola and the International Atomic Energy Agency through the **Technical Cooperation Program**

Participation

ANG5006 Improvement of Food Crops through Mutation Breeding and Biotechnology

ANG8002 Establishing a Non-Destructive Testing Laboratory

ANG1004 Establishing a Tracer Laboratory for Oil Reservoir Investigation

ANG7003 Enhancing the Use of Isotope Hydrology in the Planning, Management and Development of Water Resources and Establishing an Isotope Hydrology Laboratory

F22065 Development of Radiometric Methods for Exploration and Process Optimization in Mining and Mineral Industries

Radioisotopes and radiation technology for industrial applications

ANG 8002 Establishing of Non-Destructive Testing Laboratory Fig 1

ANG1004 Establishing a Tracer Laboratory for Oil Reservoir Investigation Fig 2

MOTIVATION

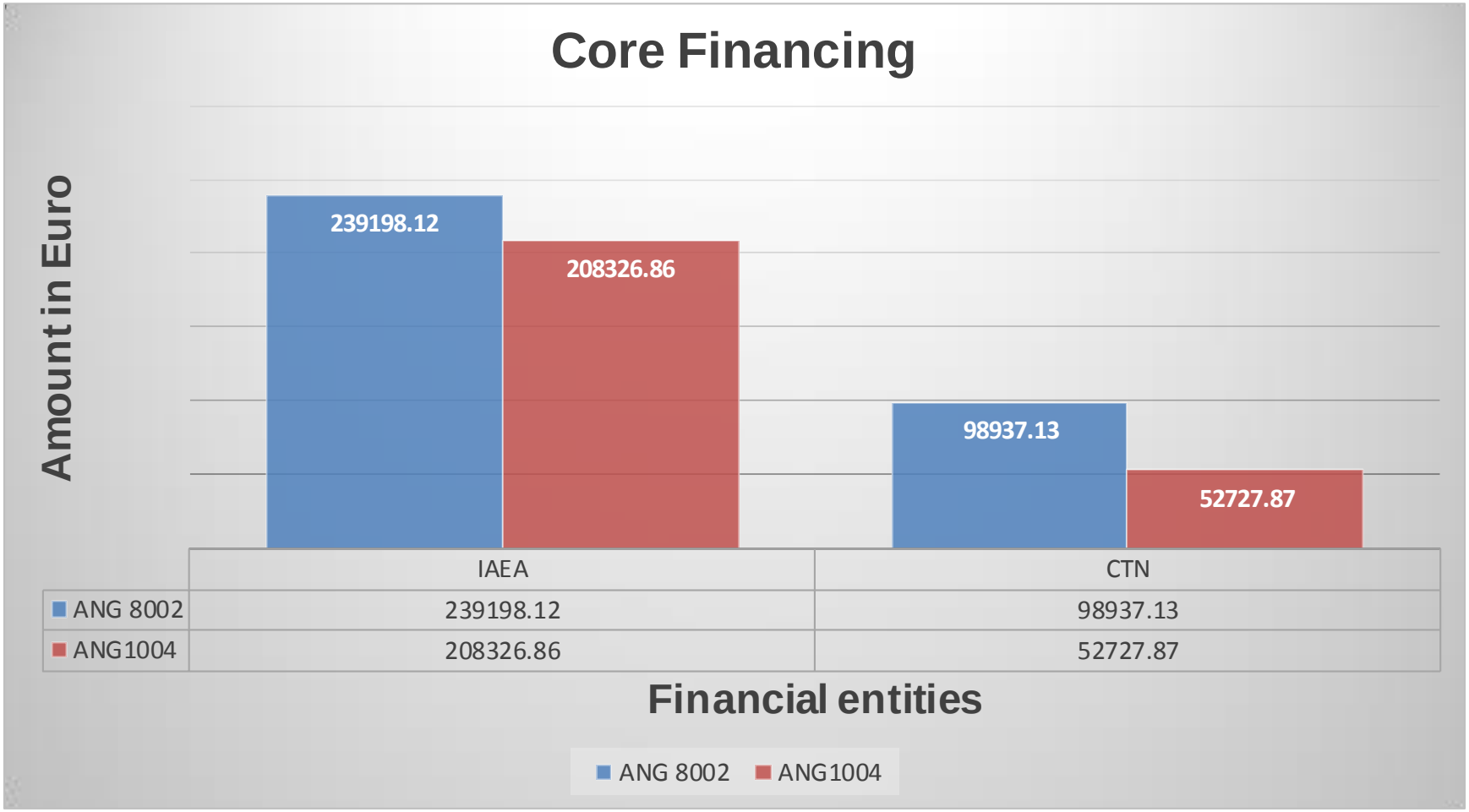
Angola Industrial development plan has grown in the petroleum , gas,hydrology, ciment and mining industries. To ensure the quality control and production monitoring programes in these industries , Non-destructive Testing NDT and Radioactive tracers methodes are needed.

METHODOLOGY

To achieve the goals proposed, three main phases have been set up in the projects implementation: outward specialists visits , human resources empowerment , training and laboratories equipment acquisition.

Synthesis of projects

Project ANG8002		Project ANG1004	
Project duration :4 years		**Project duration :2 years**	
Starting date: Jan 2007	End date: Dec 2010	Starting date Jan 2012	End date Dec 2014
Empowerment of human resources			
Trainees :12 Level :II Methode:Radiography testing, Ultrasonic testing , Magnectic particle testing,Liquid penetrant testing Timing: 4 months Training host country: Brazil, Morroco, South-Africa		Trainees:6 Level : Methode: Radiotracer technique in oil field Timing:2 months Training host country:Brazil, Vietnam	



Activities: meeting workshops:(1). Training courses(2),fellowships(3),Equipements(4) , scientific visits(5)

Investigation Lines

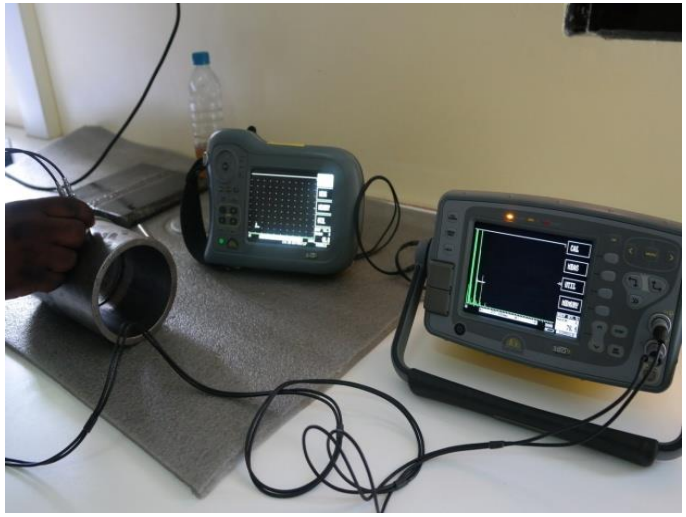
Infrastructures and Equipments : ANG 8002

Ultrasonic Testing Laboratory 32,4m^2

Fig 3

Magnetic Testing 12,7 m^2

Fig 4



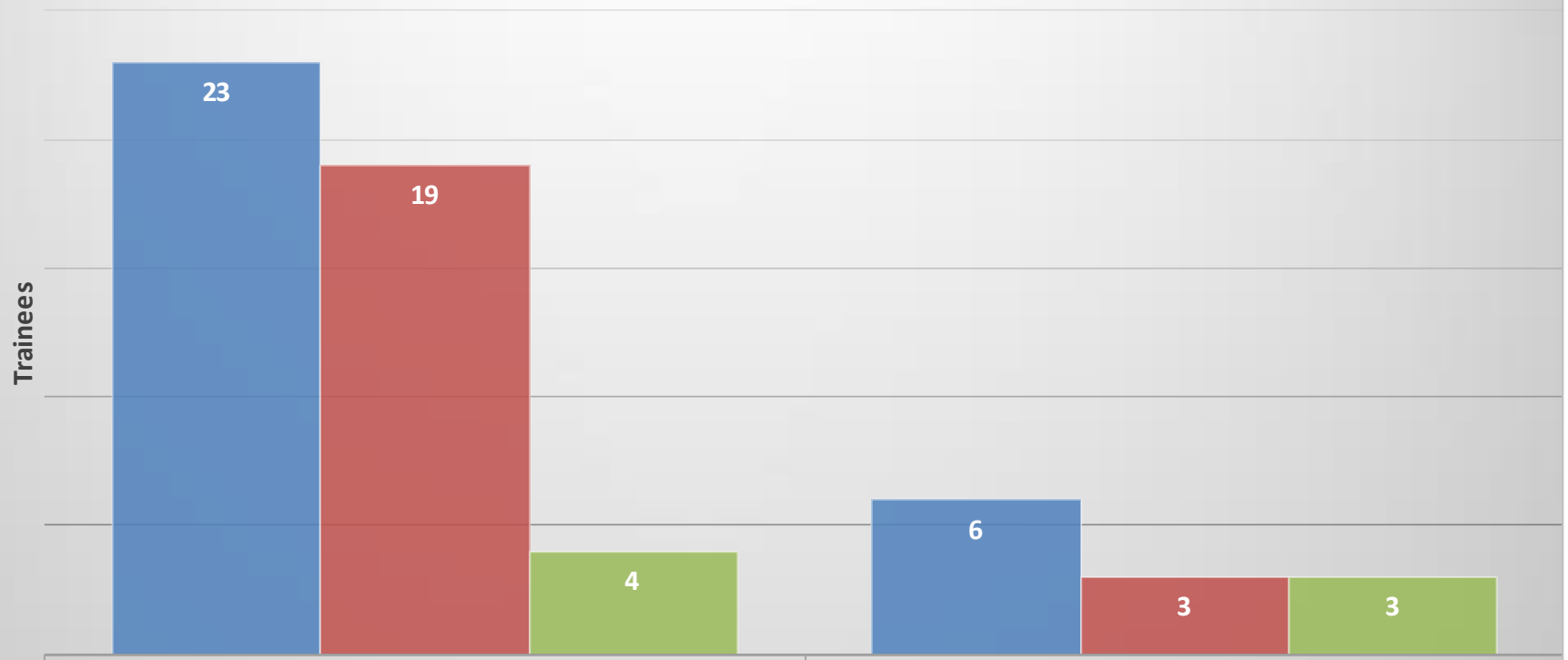
2.Infrastructures and Equipments: ANG 1004

Samples Preparation Laboratory (32,4 $m^{2)\ of}$ area) Fig 5

LSC counting room with the dimensions of 12,7 m^2 Fig 6

RESULT

CHART TRAINEES



	ANG8002	ANG1004
TRAINEES	23	6
MALE	19	3
FEMALE	4	3

DIVULGATION OF PEACEFUL, SAFE AND SECURE USE OF NUCLEAR SCIENCE AND TECHNOLOGY

Fig.7

Fig.8

Fig.9

Fig.10

- Fairs (exhibitions)
- Scientific activities

Swot Analysis

❑**Strengths**
✓Government institution
✓Qualified technicians
✓Strong Support and close vicinity to Atomic Energy Regulatory Authority (AERA)
✓ Strong linkages with:
IAEA/AFRA National universities, AFRA countries

❑**Opportunities**
✓Increasing NDT market
✓No national NDT company
✓Increasing awareness of the benefits of non-destructive testing
✓No national

❑**Weaknesses**
✓Unavailability of certified personnel
✓No exposure room at the moment
✓Unavailability of some consumables locally
✓Unavailability of accredited maintenance and calibration companies in the country

❑**Threats**
✓Competition from foreign companies
✓Bureaucracy associated with government institutions
✓Replacement of equipment

Our Vision

Future prospects are to empower human resources in various techniques to use the maximum potential of machines existing in the Centre to solve practical problems and address basic human needs.

The National technological Center has prospective with different companies about of cooperation for many project with same interest as like (control of quality and the use of isotope).

Well in this case we also need to empower to develop female potential to work in science and create more connection between women and world technological…

Conclusion

The cooperation concept always ends up in a win-win. From experience, the National Technological Centre thinks that feedback is not significant enough in term of sponsorship assessment but this does mean it will never be noticeable. It cannot appear at this initial time, it will surely.

Thank you for your attention