

URANIUM RAW MATERIAL FOR THE NUCLEAR FUEL CYCLE: Exploration, Mining, Production, Supply and Demand, Economics and Environment issues 23 - 27 June, 2014 Vienna, Austria **URAM 2014**

"DELIVERING COMPETENCE BASED TRAINING AND CAPACITY BUILDING TO SUPPORT SUSTAINABLE URANIUM MINING IN LESS PREPARED AREAS" (IN AFRICAN FRANCOPHONE COUNTRIES)

Source: PID 16 – 18 NOVEMBER 2011, Peaceful Uses Initiative PROJECT, "Supporting sustainable Uranium mining in less prepared areas"

• Ibrahim MIKO Dit ANGOULA¹, Technical Officer, Harikrishnan TULSIDAS¹, Supervisor, PM

Nuclear Fuel Cycle & Materials Section/ NEFW/ Nuclear Energy Department

1: International Atomic Energy Agency (IAEA), PO Box 100, Wagramer Strasse 5, A-1400 Vienna, Austria.

• Experts: Julian Hilton², Malika Moussaid², Michel Cuney³, Hossein Ahmadzadeh⁴, Omar Bekri⁵

2: Aleff Group (UK); 3: Univeristy of Nancy (France); 4: Ecole des Mines d'Ales (France); 5: Chapem (Morocco)

- Supporting sustainable U mining in less prepared areas, to enhance preparedness: 3 years catalytic training and capacity building programme: Technical, operational, regulatory, environmental, stakeholders and governance needs, in the context of fostering good, safe practices in a comprehensive extraction of all possible economic resources from the mining process;
- Participating countries: New countries; Restarting countries initiating or reinvigorating U mining and Active countries with a long history of U mining and milling wishing to enhance their existing capacity;
- Training courses for **Professional beneficiaries** and **affected local communities**;
- The **Methodology** is based on Competence based Training in a safe and sustainable conduct of U production life cycle;
- The Approach: competency matrix by type of jobs description, training courses to be adapted to local conditions, Personal Professional Development Plan, Regular feedbacks, monitoring and evaluation, follow-up of summative and normative indicators, focusing on these latest as



MEMBERS

TEAM

0

A

N

Ζ

ORGA

2

S

 \mathbf{m}

guide to qualitative improvements in line with sustainability goals, control and assurance quality ("PDCA");

Proposed outcomes are to enhance preparedness with two major critical dependencies: Competency centre tasked with supporting the professional community and critical mass in that community.



PROJEC ШН 0 BENEFITS

TANGIBLE: (Trained personnel; Trained trainers; Progressive adoption and adherence to good practices and international standards; Peer to peer, and peer to expert support network; New resources from **Corporate Social Responsibility [CSR] programmes; Enhanced** participation of communities; Enhanced exploration and mining capability with performance indicators; Demonstrable good practices; Enhance occupational, public and environmental health and safety; **Competency Centre; Personal development plans; More timely more** accurate reporting e.g. Red Book data).

INTANGIBLE: (Community and stakeholder well-being; Increased transparency in governance and more accountable CSR programmes; Enhanced attitudes to uranium mining; Enhanced national self-sufficiency in requisite skills and expertise; Increased national confidence in its capacity to meet sustainable mining goals).

Risks

- Unavailability of key personnel;
- Schedule conflicts;
- Civil unrest;
- Local administrative conditions;
- **Economic migration.**

Impact of changes: (short term, medium term and long term) A project of this relatively small scale has little power to influence external forces that might negatively impact it.

- Legislation;
- **Policies**;
- Joint Venture agreements;
- Stakeholder attitudes;
- Uranium markets (price trends);
- Improvement in environmental and social responsibilities.

Feedbacks - monitoring – evaluation/ Quality assurance and quality control

- Regular feedbacks, monitoring and evaluation allowing adjustments and readjustments of the training courses and the activity programme with a follow-up of the normative and summative indicators;
- Control and quality assurance will be guaranteed by the "PDCA" ("Plan Do Check Act") approach.