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DVELOPPING NATIOANL CAPACITY TO INITIATE NUCLEAR POWER PROGRAMME

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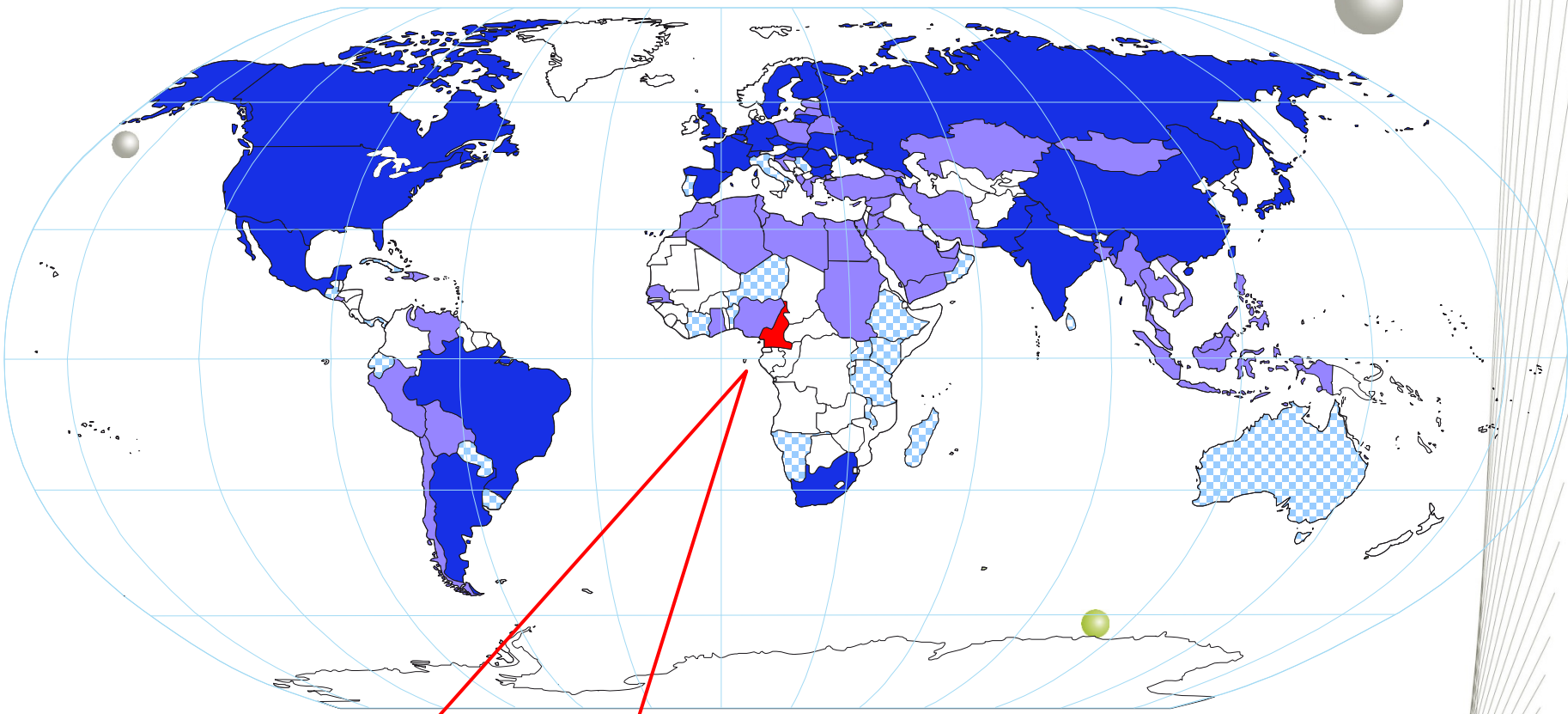
CAMEROON



My name is CAMEROON

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OUTLINES

1. Introduction
2. Eduction/Research and training institutions
3. Workforce Planning
4. Conclusion

1. Introduction

- The challenges of meeting electricity demand, reducing reliance on imported energy, and promoting economic growth while lowering carbon dioxide emissions, leave many emerging nations with no alternative but to consider nuclear energy as a key component of their economic development and energy security strategies;

- While the developed world gets cold feet on nuclear power, its prospects in developing countries are different

1. Introduction (cont'd)

Serious challenges remain in introducing a nuclear energy infrastructure in developing countries:

- **Long-term commitment and stable policy**
- **Financial problem (lack of funding);**
- **Implementation of different reactor technologies.**
- **Inadequate infrastructure for HRD;**
- **Insufficient level of R&D supporting HRD;**
- **Lack of long term strategy for HRD;**

2. Education/Research and Training Institutions (1/2)

- It is necessary to have a **good general engineering and physics education infrastructure**, producing high calibre graduates;

- The Country should consider establishing its own nuclear training centre (NTC) to provide the necessary **link between the nuclear 'education' provided by universities and technical schools and the specific knowledge, skills, attitudes and experience** required to develop the competence to work at an NPP.

- If a nuclear research capability already exists within the Country, then it is important, as far as practicable, **to align the activities of the education/research institutions and the nuclear energy programme** to try to achieve a beneficial balance between academic rigour and industry oriented application

2. Education/Research and Training Institutions (2/2)

- If a strong under/postgraduate nuclear engineering education infrastructure does not already exist, but it is planned to build one as part of a national nuclear energy programme, it is important that **both industry and academic institutions work closely** to develop such programmes to ensure that they are practical and oriented to the national need;
- An important element of any relationship between the nuclear industry and any education or especially training institutions is the adoption of a **Systematic Approach to Training (SAT)** to ensure that any education and training programmes proposed meet the needs of the industry.
- **For the nuclear industry, there are many benefits to be gained from cooperating with educational institutions**

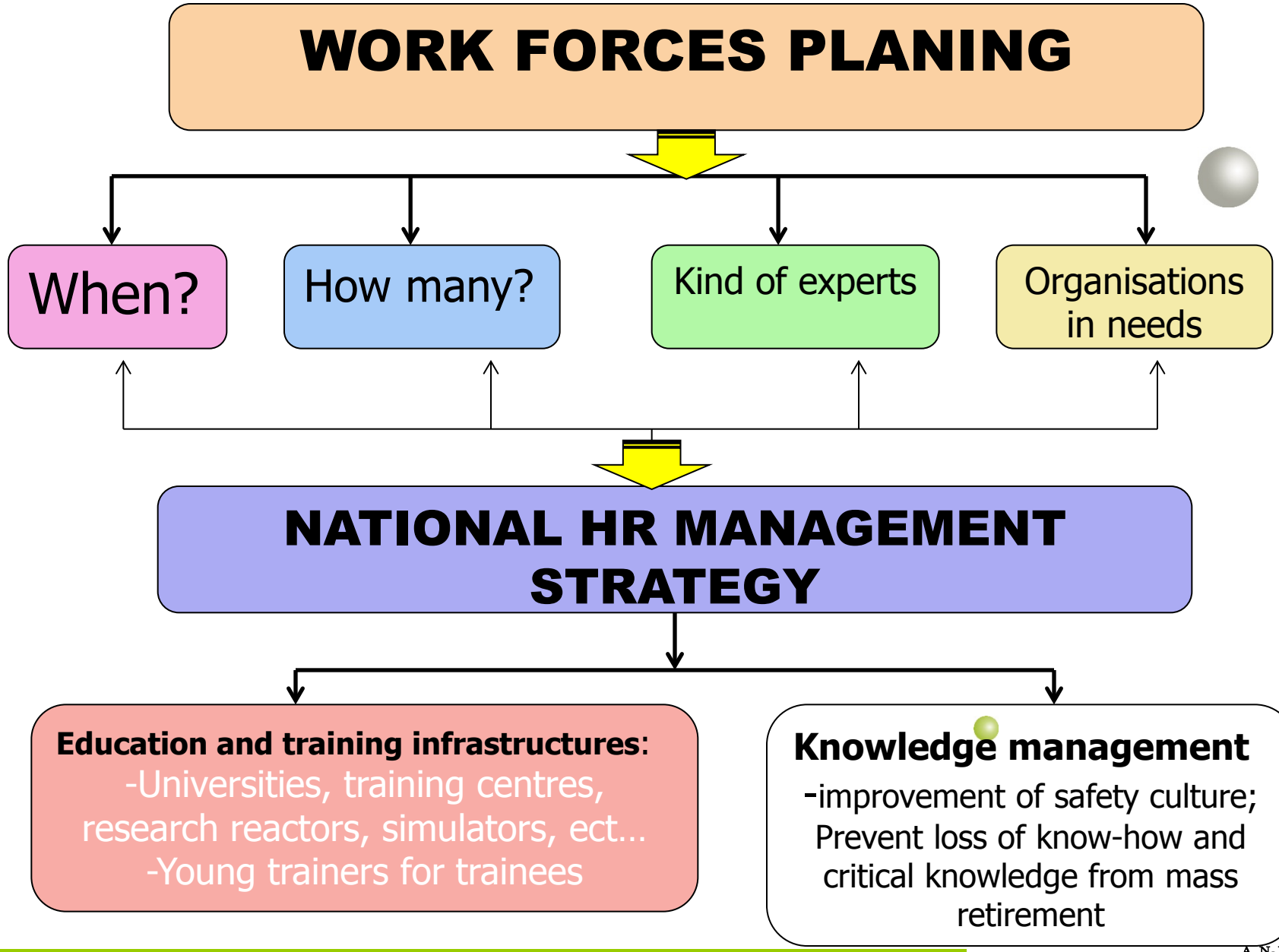
3. Workforce Planning in HRD (1/2)

- Workforce planning is defined as the systematic identification and analysis of what an organization is going to need in terms of the **size, type and quality of workforce** to achieve its objectives.
- It determines what **mix of experience and competencies** are expected to be needed, and identifies the steps that should be taken to get the **right number** of the **right people** in the **right place** at the **right time**
- Workforce planning should be seen as an integral part of an organization's HRD strategy and plans, and should be consistent with other HR processes such as recruitment, training and remuneration

3. Workforce Planning in HRD (2/2)

- The nuclear field, comprising industry, government authorities, regulators, R&D organizations and educational institutions, **relies heavily on a specialized, highly trained and motivated workforce for its sustainability;**

- An ageing workforce, declining student enrolment and the resultant risk of **losing accumulated nuclear knowledge and experience** for expanding or newly established nuclear programmes are all serious challenges that influence the management of human resources (HR) in the nuclear field


WORK FORCES PLANING
When?
How many?
Kind of experts
Organisations in needs
NATIONAL HR MANAGEMENT STRATEGY
Education and training infrastructures:
-Universities, training centres, research reactors, simulators, ect…
-Young trainers for trainees
Knowledge management
-improvement of safety culture; Prevent loss of know-how and critical knowledge from mass retirement

5. Conclusion

- **Nuclear power is needed for Developing Countries in the long term development strategy ;**
- **Developing Countries are lack of man power for both the NPP projects and the long term nuclear power program ;**
- **A long term HRD program (strategy) is needed to be established, in cooperation with Developed countries;**
- **Education and training abroad is essential to the technology transfer;**
- **Establishment of adequate infrastructure supporting HRD** (nuclear engineering faculties, research groups, technical support centers) **is indispensible for Developing Countries**

5. Conclusion

Opportunities…..

The development of a Strong National Human Resource Strategy can be achieved through the IAEA technical assistance.

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Drink small mineral water from Cameroon

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