

Nuclear Sciences and Applications at IAEA

Contributing to the Sustainable Development Goals

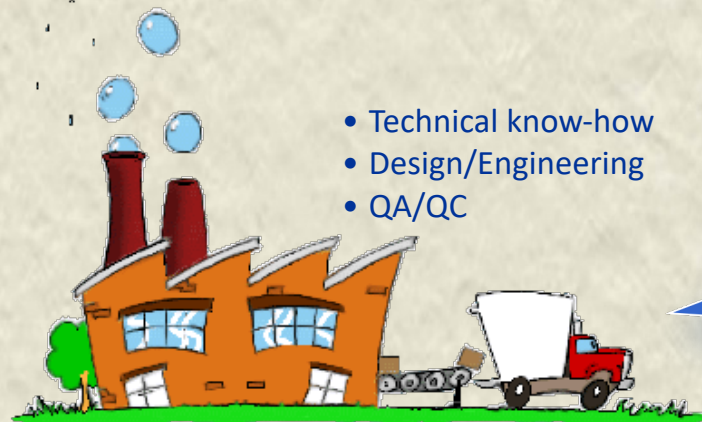
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International Atomic Energy Agency*

**UK Nuclear Academics Meeting
Bangor, September 10-11, 2019**



Technology transfer: an analogy



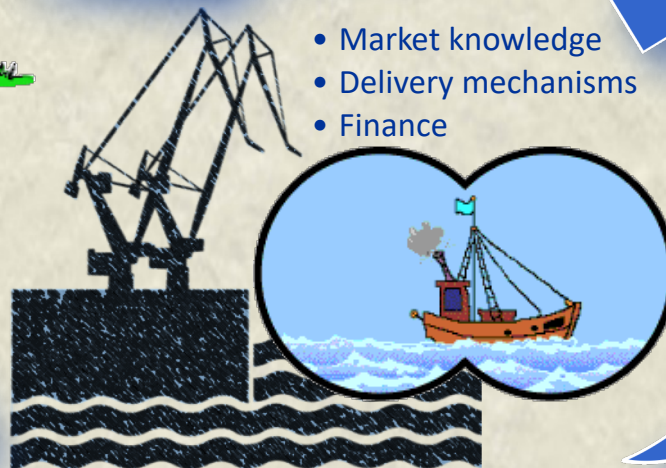
- Technical know-how
- Design/Engineering
- QA/QC

Producers
(Technical Departments)

- Needs identification
- Infrastructure
- On site implementation



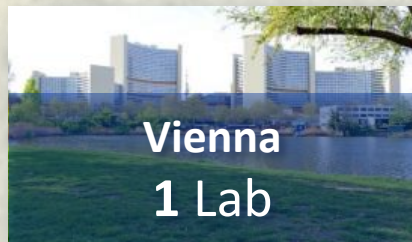
Customers
(Member States)



Brokers
(Technical Cooperation Department)

- Market knowledge
- Delivery mechanisms
- Finance

12 Dedicated Laboratories



Water Resources



Food & Agriculture

Human Health

Nuclear Science

Environment



Environment







1.5 billion
people depend
on degraded land

Using isotopic techniques to help
improve soil fertility and efficient
water management

2 ZERO
HUNGER



Developing more productive and resilient crop varieties

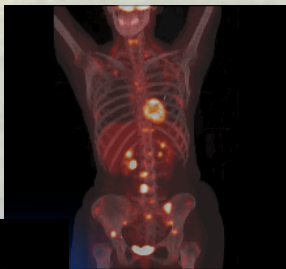
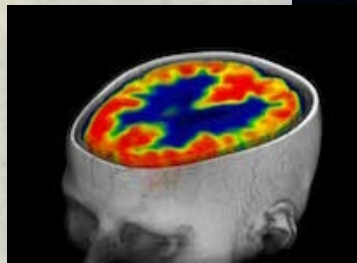
Over 3,200 crop varieties have
been released to farmers





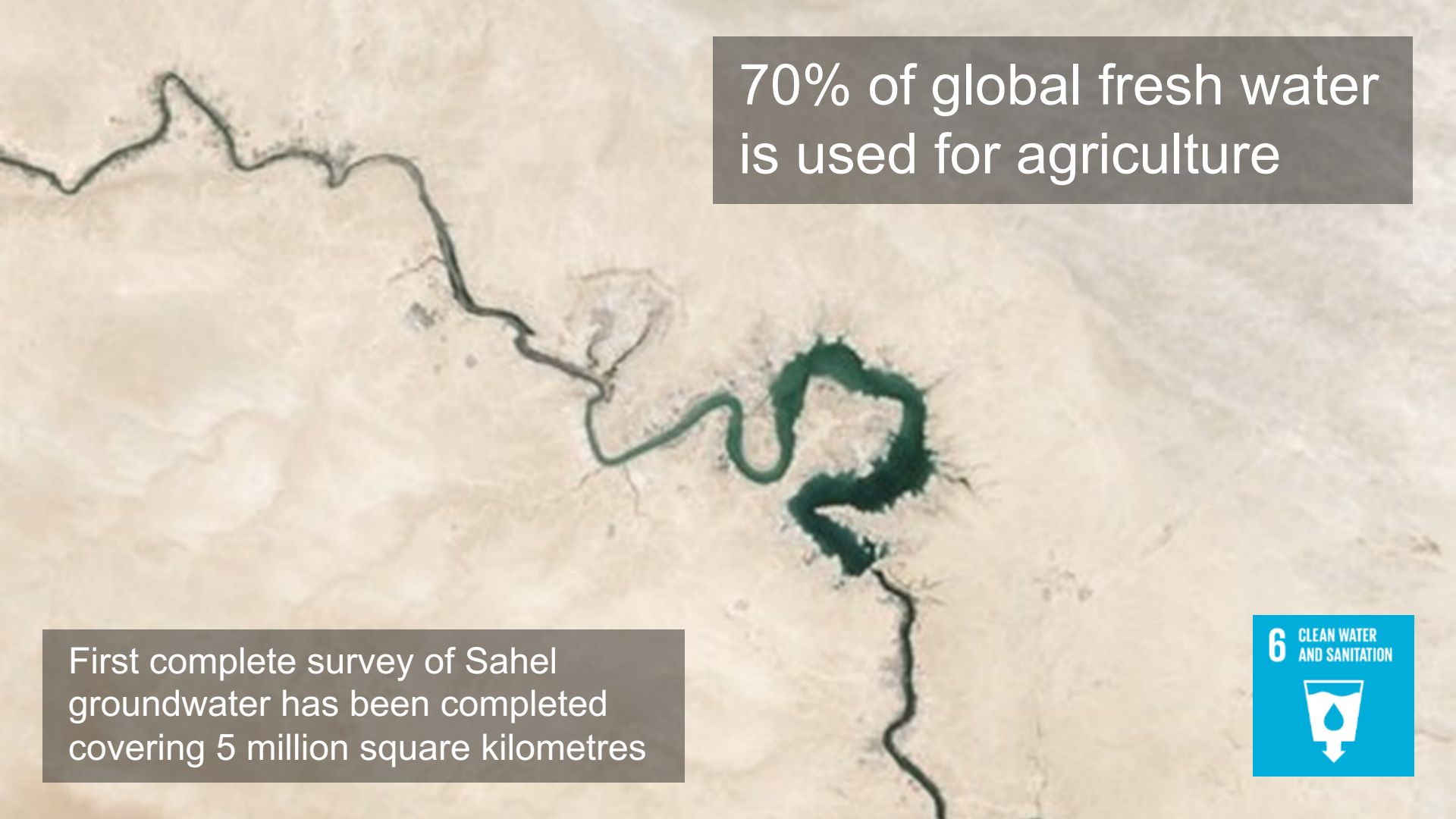
Sterile Insect Technique: an environmentally-friendly insect pest control

Protecting crops, livestock and human health through the suppression, eradication, containment and prevention of pests



Support of cancer
radiotherapy treatment and
diagnostic imaging projects,
as well as support of nutrition
centres and human resource
development






70% of global fresh water
is used for agriculture

First complete survey of Sahel
groundwater has been completed
covering 5 million square kilometres





Cultural artefacts can be preserved and explored and checked for vulnerabilities



13 CLIMATE
ACTION



14 LIFE BELOW
WATER



15 LIFE
ON LAND



Good data informs good decisions
on environmental policy

Nuclear science helps us understand the effects of
climate changes on land, in the oceans and in the air

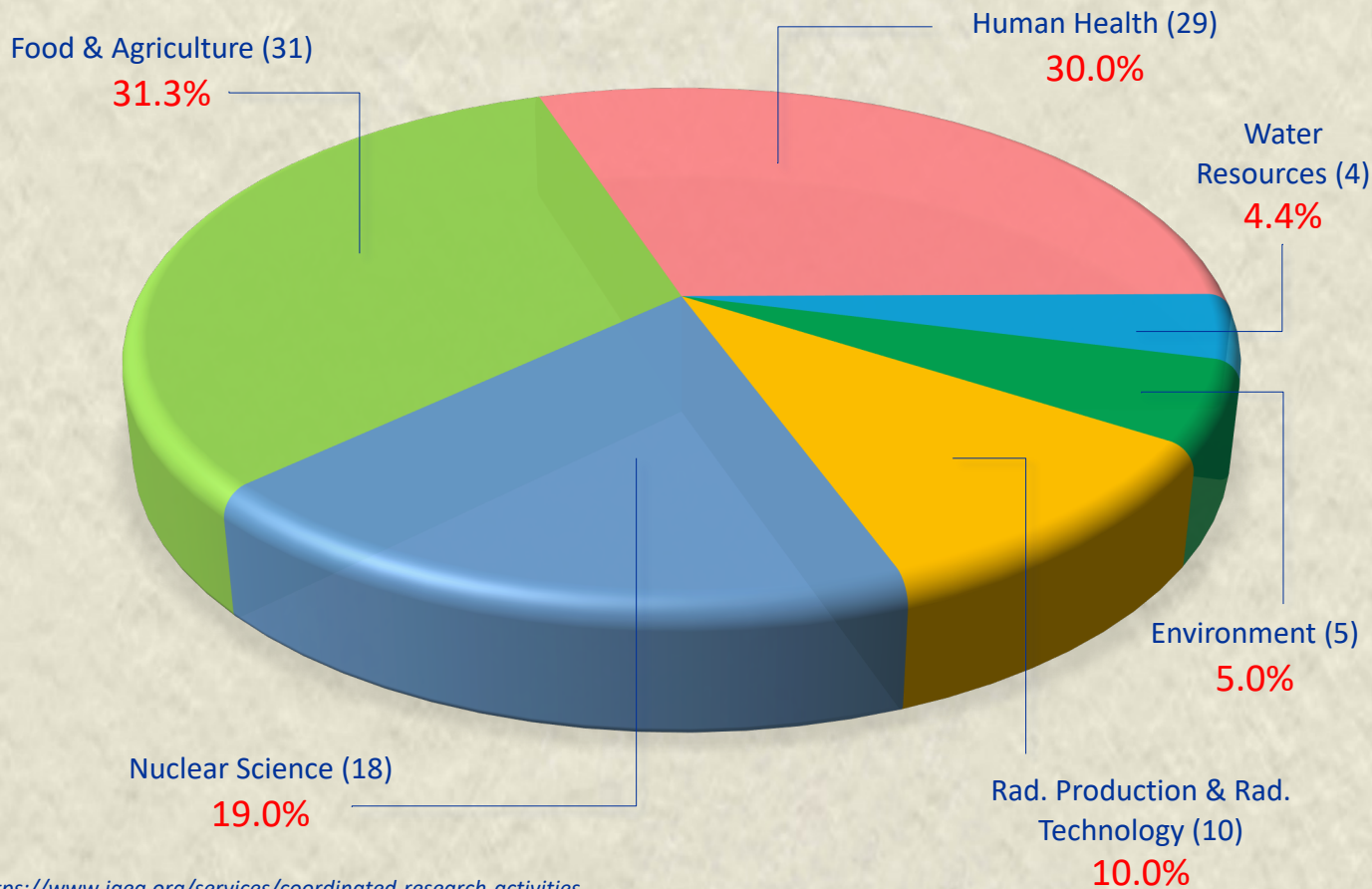


Air pollution causes 4.2 million deaths a year

Isotopic and nuclear techniques can identify sources of pollution and track and predict their movement around the world

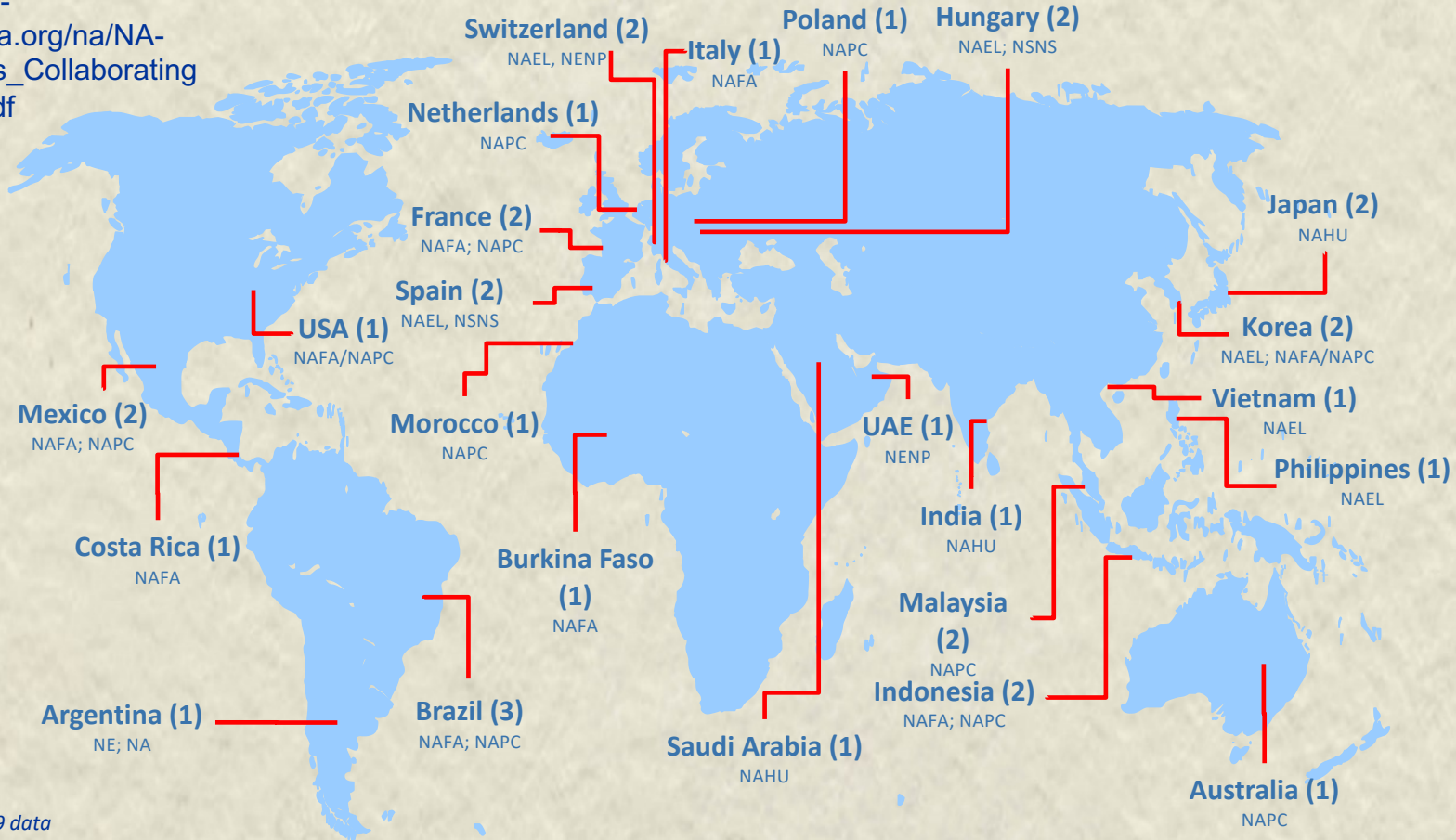


Coordinated Research Projects



36 IAEA Collaborating Centres worldwide - NA

http://www-naweb.iaea.org/na/NA-Factsheets_CollaboratingCentres.pdf





100 Coordinated Research
Coordination Projects

> 1000 Active Technical
Cooperation Projects

171 Member States

36 Collaborating Centres

12 NA Research Laboratories

Thank you

#atoms4life

