

#### WHAT IS WILDLIFE ENFORCEMENT MONITORING SYSTEM (WEMS)?

WEMS is a web-based information system with GIS functionality developed by United Nations University in 2005 to support governments needs in collecting, compiling and sharing wildlife law enforcement information.

#### VISION

WEMS initiative aims to be an action-oriented tool that will lead to the collaborative enforcement of legislations related to biodiveristy and species conservation and support monitoring of SDGs.

#### Origin Countries | Number of Cases



#### Destination Countries | Number of Cases









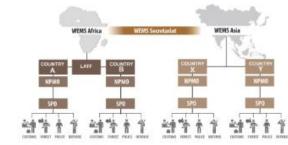
CAPACITY

DEVELOPMENT COMPONENT



AND OUTREACH COMPONENT

The information-sharing protocol under WEMS will be as depicted in the diagram below. For WEMS Africa, the LATF will facilitate the information exchange; while the role for WEMS Asia will be managed through the WEMS Secretariat at AIT.



#### WEMS SUPPORTS



Multilateral Environmental Agreements (MEAs)



"...information obtained from geographical mapping platforms such as the Wildlife Enforcement Monitoring System could be used to determine key variables needed to understand the state of biodiversity and the changes it was undergoing."

Source: United Nations, General Assembly, Report on the United Nations/Kerrye Conference on Space Technology Applications for Wildlife Management and
Protecting Bandwerster, report of the Committee on the Foundation of Outer Space, AJAC 109-1126-127 October 2016, available from undoccored AJAC 109-1126-127

www.wems-initiative.org





#### WHAT IS WEMS?



 A GIS-based model to monitor effectiveness of and compliance to legislation at national and regional level



level
 A common platform for sharing information of wildlife crimes among local and national public sector agencies



 A tool to integrate national efforts regionally and globally and ensure timely analysis and subsequent policy development



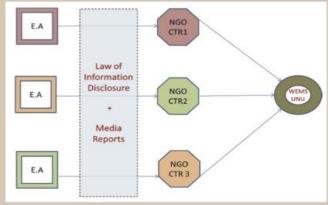
 A solution to monitor compliance with CITES and other relevant MEAs



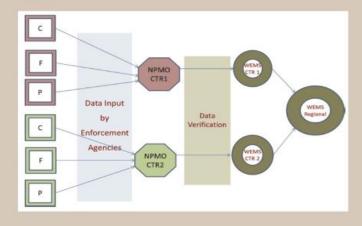


#### **HISTORY**

- WEMS as a civil-society based information gathering process through Asian Conservation Alliance (ACA)
  - Freedom of Information Act
- WEMS as a working model for national/ regional enforcement bodies
  - Sovereignty Principle: State as the fundamental guarantor of information locally
  - Enforcement Jurisdiction: State as sole proprietor to enforce legislation
  - WEMS deployment in East Africa through LATF in 2011
    - Congo-Brazzaville, Kenya, Liberia, Tanzania, Uganda and Zambia



Source: If WEMS is the solution, what is the problem?







## **NFORCEMENT MONITORING SYSTEM (WEMS)?**

on system with GIS functionality developed by United Nations University ts needs in collecting, compiling and sharing wildlife law enforcement





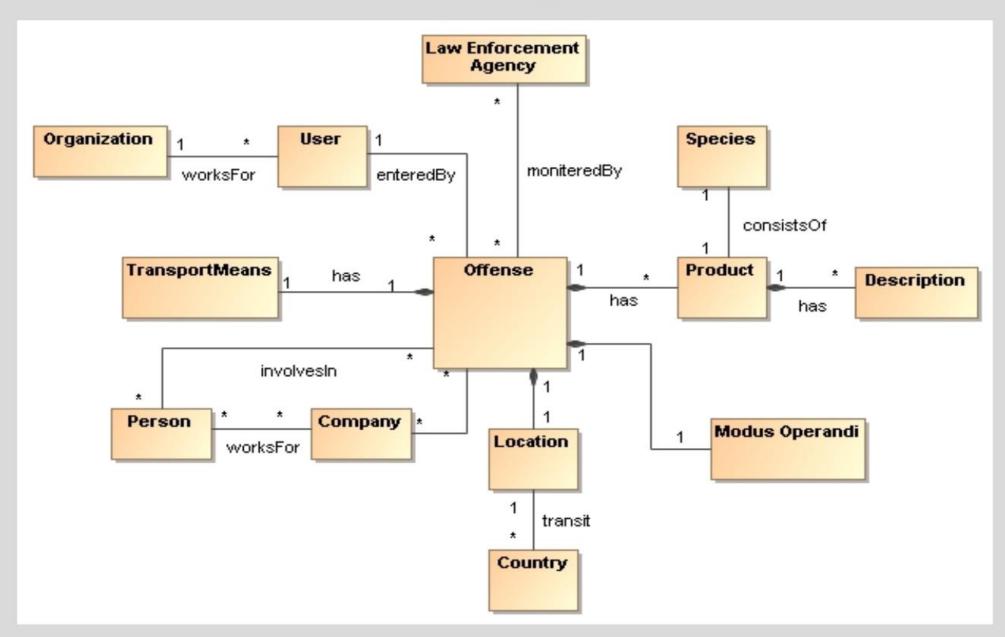






The information-sharing protocol under WEMS will be as depicted in the diagram below. For WEMS Africa, the LATF will facilitate the information exchange; while the role for WEMS Asia will be managed through the WEMS Secretariat at AIT.

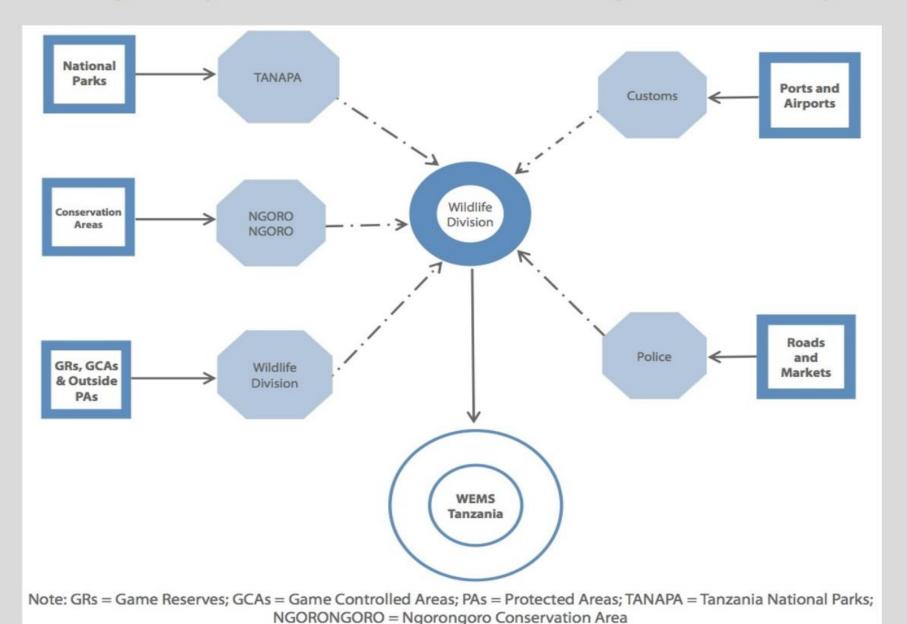
## WEMS Conceptual Model







#### Inter-agency Information-sharing at country-level





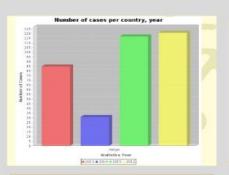
# HOW THE WEMS PLATFORM WORKS OUTPUTS

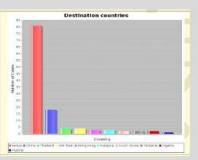
Nominal Data



- Non-Nominal Data
- Non-spatial Data

Spatial Data











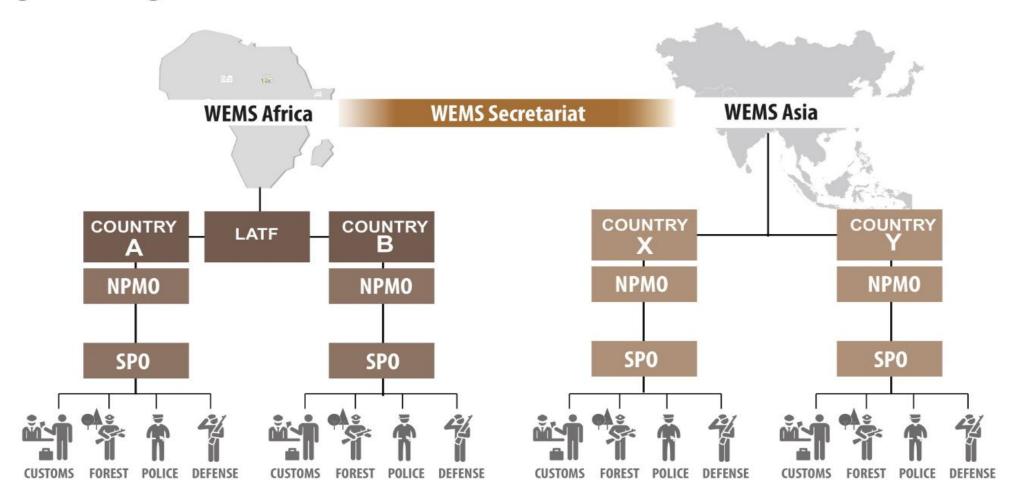








The information-sharing protocol under WEMS will be as depicted in the diagram below. For WEMS Africa, the LATF will facilitate the information exchange; while the role for WEMS Asia will be managed through the WEMS Secretariat at AIT.



#### WEMS SLIDDORTS

## HOW IT SUPPORTS MEMBER STATES

- Empower member states in managing sensitive information and reporting
- Provide evidence of national efforts in meeting national targets and international commitments
- Adopting Sustainable Development Goals (SDGs) with specific targets to tackle critical issues
- Act as a informational platform that supports institutions at all levels, local, national, and international
- Generate evidence for robust environmental governance







## Data Visualization Tools

WEMS - Africa Dashboard

http://arcg.is/0fiuHO

WEMS – Thailand

http://arcg.is/01evXy

#### **Current Activities:**

#### Assessment of Wildlife Crime Databases

- Identify gaps in wildlife crime information-sharing for monitoring enforcement
- Establishment of an information-sharing mechanism for enhanced environmental governance in Asia
- Strengthen capacity for data collection and institution of of the community of practice for improved coordination and knowledge transference

Enhancing International Cooperation in Science, Technology and Innovation in Addressing Wildlife and Forest Crime; 10-13 April 2018; AIT



## Implementations and Enchantments

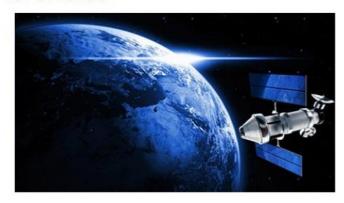
Implementation in Africa and its replication in Asia is imperative to systematically dismantle the network of perpetrators through an effective transcontinental link

across the supply class



Enhancements through integration of technologies will help development of capacity among key stakeholders and establishment of community of practice will reinforce law enforcement.

Space applications forensics



DNA sequencing for wildlife









### THANK YOU

http://wems-africa.org:8080/wems-demo

For further information, please contact:

Mr. Manesh Lacoul

Deputy Director WEMS Secretariat, AIT Solutions Asian Institute of Technology P.O. Box 4, Klong Luang Pathumthani 12120 Thailand

+66-2-524 6653 manesh@ait.asia