EO for sustainable development in areas affected by drugs and crime

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SDGs and thematic areas
EO example applications in UNODC

- Research for policy making, project planning and monitoring
  - To address drug production and trafficking: Illicit Crop Monitoring Programme
  - Monitoring of crop substitution projects
  - Monitoring of illegal mineral mines
- In support of law enforcement/anti-corruption programmes
  - Illicit crop eradication verification
  - Drug production sites and trafficking routes
  - Illegal logging/deforestation sites
  - Illegal fishing vessels
Illicit crop mapping with HR/VHR images

• Annual surveys in Afghanistan, Bolivia, Colombia, Mexico, Myanmar, Peru
• Irrigated poppy field after sowing
• Developed poppy crop

Sources: UNODC – Mexico and World Drug Report 2023
Planning development projects in opium growing areas in Myanmar

Source: UNODC - Myanmar
Territorial planning in cocaine gold producing areas in Colombia

Source: SIMCI/UNODC - Colombia
Territorial spatial planning and monitoring

Source: SIMCI/UNODC - Colombia
Automatized detection of unregistered landing strips in the Amazon

Source: UNODC - Vienna
Convergence of crime

- EO derived:
  - Illicit crop cultivation area
  - Land cover
  - Deforestation
  - Mining areas
  - Unregistered air strips

- Other geographical data e.g.:
  - Attacks on environmental defenders
  - Homicides

Source: World Drug Report 2023, UNODC
Cooperation on developing EO applications

- Security applications to embed EO and non-EO information – illegal mining and other illegal activities: ESA- EO4SECURITY
- Risk maps for potential illicit crop cultivation – UNAM-Mexico and University of Salzburg
- GeoAI challenge for crop land mapping in Afghanistan – with ITU
Geospatial research products

Story maps

Online portals:
- World Drug Report
- Drug Monitoring Platform

Reports
THANK YOU

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