











## Thesis or Internship in Central Asia in the frame of Sustainable Sanitation

# Feasibility of the use of separately collected human urine from ecosan toilets in agriculture in Kyrgyzstan

**WECF** is a network of environmental organizations in 30 countries throughout Eastern Europe, Caucasus and Central Asia. One of our major focuses in integrated rural development projects is to contribute to access to safe water and sanitation for all. We promote Sustainable Sanitation, mainly Urine Diverting Dry Toilets (UDDT) or so-called Ecosan toilets as a sustainable solution for rural areas in the region.

**KAWS** is a Kyrgyz NGO promoting safe drinking water and sustainable sanitation. KAWS in based in Bishkek, Kyrgyzstan.

**CAAW** is a Central Asian NGO promoting safe drinking water and sustainable sanitation. CAAW is based in Osh, the second city in the South of Kyrgyzstan.

#### **Background:**

The UDDT or so-called Ecosan toilet has been introduced to Kyrgyzstan in the last 8 years. More than 250 UDDT have been constructed in Osh and around 100 UDDT in the Issyk Kul region. The UDDT are well accepted but the use of the toilet products in agriculture lacks acceptance.

#### **Scope of the work:**

Increase the acceptance of the safe use of urine in agriculture in Kyrgyzstan

#### Student's tasks:

- ✓ The student reviews the related literature and summarises the theoretical background of the use of urine in agriculture.
- ✓ The student gathers all available information and experiences on the use of urine by KAWS, CAAW and other NGOs in Kyrgyzstan (expert interviews, focus group discussions)
- ✓ The student develops draft guidelines for the safe use of urine in Kyrgyzstan which will be used for discussions with governmental stakeholders.

### and/or

- ✓ The student studies the feasibility to treat the separately collected urine further such as struvite production or terra preta treatment.
- ✓ The student pilots a struvite reactor or a terra preta treatment for the urine treatment.

The student should have an interest in sanitation and agriculture. He or she will travel in Kyrgyzstan for at least 6 weeks, will be supported by WECF, CAAW and KAWS.

It can be a joint work by two students as well.

All costs for local accommodation and transport in Kyrgyzstan are covered by WECF, CAAW and KAWS. Costs for the flight to Kyrgyzstan are preferably funded by the student or an external source.

Language skills: Student must be fluent in English.

Russian, Turkish or Kyrgyz would be useful but not a must.

Work should start latest in September 2014.

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More information about WECF: <a href="www.wecf.eu">www.wecf.eu</a> and CAAW: <a href="http://www.caaw.asia/en/">http://www.caaw.asia/en/</a> About the work of KAWS and WECF in Kyrgyzstan: <a href="http://www.youtube.com/watch?v=YJ1gJgwROVg">http://www.youtube.com/watch?v=YJ1gJgwROVg</a>