NATUR VÅRDS VERKET

Nutrients in the ecocycle in Hulta by

In Hulta by outside Linköping, households have installed urine-separating toilets. Sludge and urine are collected by a farmer in the village who returns the crop nutrients to the agricultural land. This is an ecocycle-adapted and small-scale sewage solution that has been successful thanks to the strong commitment of the residents.

The Hultabygden project is an example of a small-scale sewage system that works well. With support from the local investment programme (LIP), 18 urine-separating toilets were installed in households with private sewage systems in the village of Hulta by, outside Linköping. Sludge and urine are stored and hygienised for six months and then used as crop nutrients on the fields in the village. Urine separation has reduced the leaching of nitrogen, potassium and phosphorus nutrients. The local ecocycle association has been instrumental in finding small-scale, ecocycle-adapted sewage solutions. As a result of their work, the residents today have an insight into why the nutrients have to be utilised and returned to agriculture.

POSITIVE ENVIRONMENTAL AND ECONOMIC IMPACTS

- Reduced inputs of phosphorus (16 kg/year), nitrogen (172 kg/year) and potassium (39 kg/year).
- Return of nutrients to agriculture.
- The farmer gains free crop nutrients and payment for emptying the septic tanks.
- The households do not face any additional costs for wastewater management.
- The farmer lets land for vegetable and potato growing.
- Increased biodiversity due to organic cultivation.

Photograph: Oscar Josefsson

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IMPLEMENTATION

The Hultabygden Project is an example of an ecocycle system that works well for a village with relatively few households. Notable features of the project are the high level of knowledge and motivation among the households – everyone cooperates in returning nutrients to agricultural land. There is also close contact and dialogue between the residents and the farmer. The local involvement is the main reason why the project has been so successful.

POTENTIAL AND FUTURE BENEFIT

The village's farmer lets land for the joint growing of vegetables, it is possible to book potato furrows and various social activities are held every year. The farmer who collects sludge and urine holds KRAV certification and grows organically, leading to greater biodiversity in the cultivated landscape.

There is a steady stream of visitors to Hulta, including students from the Swedish University of Agricultural Sciences and Linköping University. The project has its own website and takes part in the Sustainable Countryside network. Responsibility for private sewage systems needs to be borne by the municipality, but it ought to be possible to apply the model of a farmer dealing with a local area to other places in order to avoid centralisation and long-distance transport.

WHY BEST PRACTICE

Creating sustainable and ecocycle-adapted water and wastewater systems is important both for the infrastructure of society and for the environment. One aspect of adaptation to the ecocycle is re-using the water, nutrients and energy in wastewater. Phosphorus should be returned to arable and other productive land.

In Hulta by, the ecocycle association has always pressed for local solutions to be found for wastewater management. As a result of their work, the residents today have an insight into why the nutrients have to be utilised and returned to agriculture. The local involvement is the main reason why the project has been so successful.

FOR FURTHER INFORMATION

Contact
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Contractor
Toilets: Wostman Ecology AB and BB Innovation & Co AB
Excavation and heating and plumbing: local contractors

The project on the Internet:
http://biphost.spray.se/hultabygden

Further information on Best Practice
www.swedishepa.se/bestpractice
www.naturvardsverket.se/mir

FACTS

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