EARTH
REVIVAL

TECHNOLOGY OF THE FAST RECYCLING OF SEWAGE SLUDGE INTO ORGANIC FERTILISER

2019

RECYCLING SEWAGE SLUDGE INTO ORGANIC FERTILISER

WE PROVIDE THE RATIONAL SOLUTION TO PROBLEMS OF MUNICIPAL SEWAGE SLUDGE

1 THE QUANTITY OF ORGANIC ELEMENTS IN THE SOIL CONSTANTLY DECREASES

2 THE QUANTITY OF THE SEWAGE SLUDGE CONSTANTLY INCREASES

3 THE OVERWHELMING MAJORITY OF THE SEWAGE SLUDGE DISPOSAL METHODS ARE EXPENSIVE, OR HARMFUL, OR CONTAIN BOTH OF THESE FACTORS

Earth Revival Ltd, an EU-based research group and company which offers a viable solution for the sludge problem by using an innovative technology for recycling municipal sludge and animal manure into high quality organic fertiliser for agricultural use.

Most municipalities face the growing problem of wastewater treatment. In many cases, waste is dumped into landfills or directly into nature. Not only are these disposal methods costly, they cause devastation to the environment and public health, wasting an organic resource that has the potential to play a major role in the natural cycle.

RATIONAL SOLUTION

TECHNOLOGY AND PROCESS

Some existing projects of producing energy, eg. biogas, minerals and chemicals out of the sludge, do not prove to be sustainable and viable financially. Furthermore, in the majority of the cases, most of the sludge is eventually dumped at the end of the process. Incineration represents total elimination of the sludge but is extremely expensive.

In the recent years, out of concern for the profound soil degradation, a growing trend of shifting to organic fertilisers is taking over within the agricultural industry.

The global organic fertilisers market is expected to post a CAGR of over 14% during the period 2019-2023, according to the latest market research report by Technavio.

www.businesswire.com

After analysing the pitfalls of various projects that attempt to find a solution to this growing problem, we have developed a smarter and more attractive alternative. We offer an advanced, effective, and safe technology to transform the problem of municipal sludge into a sustainable and lucrative business opportunity.

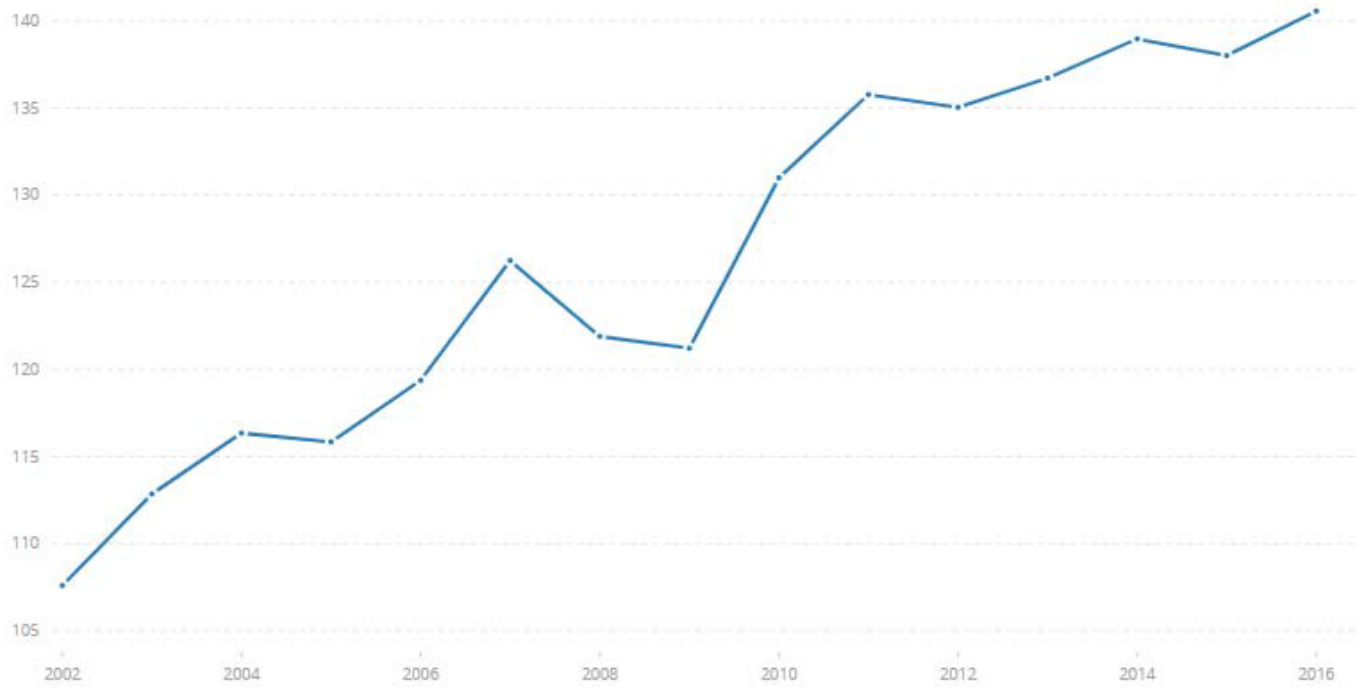
SOIL DEGRADATION

THE PERMANENT LOSS OF ORGANICS CAN MAKE IT IMPOSSIBLE TO OBTAIN A CROP – EVEN WITH THE HELP OF MINERAL FERTILISERS

Fertiliser consumption measures the quantity of plant nutrients used per unit of arable land. Fertiliser products cover nitrogenous, potash, and phosphate fertilisers (including ground rock phosphate).

Poor farming practices combined with the overuse of chemical fertilisers on poor soils have caused a negative environmental impact, which leads to the degradation of arable land. The effort to increase productivity by increasing the use of various chemicals in fertilisers further diminishes soil fertility.

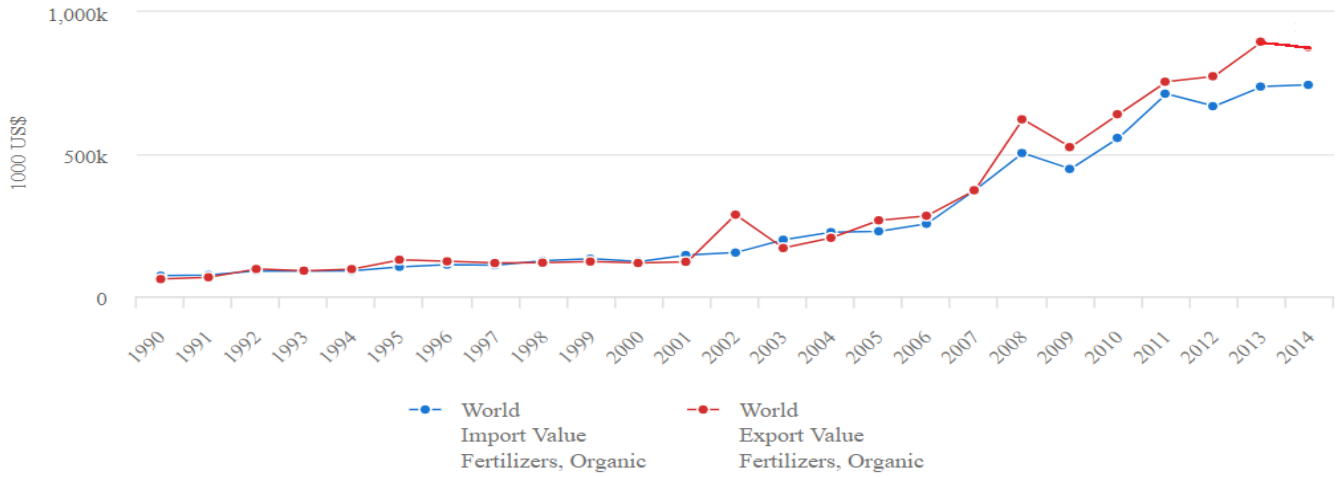
World chemical fertiliser consumption increased from 106.4 kg./ hectare (2002) to 137.6 kg./hectare (2015).



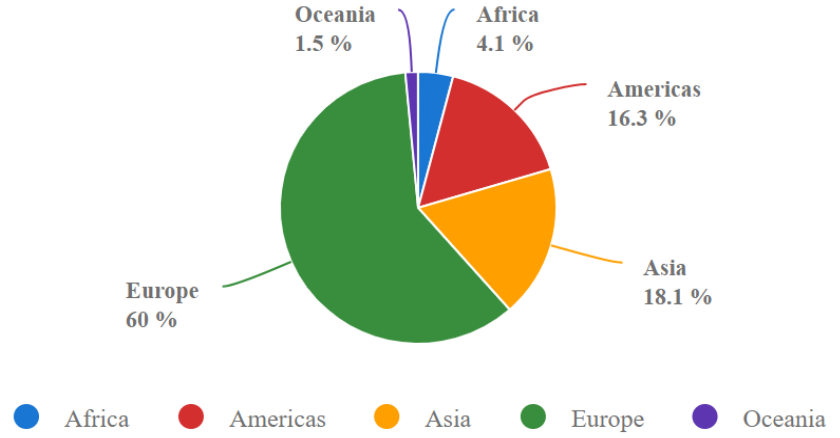
https://data.worldbank.org/indicator/ AG.CON.FERT.ZS

FERTILISERS - TRADE VALUE*

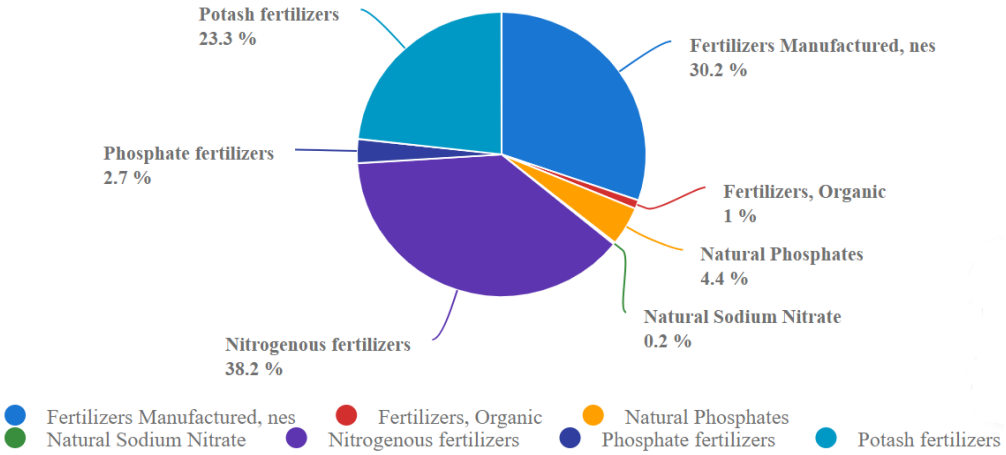
ORGANIC FERTILISER IMPORT VALUE, WORLD: 1990 - 2014



WORLD IMPORT VALUE BY CONTINENTS, 2014



WORLD IMPORT VALUE BY FERTILISERS, 2014



*http://www.fao.org/faostat/en/#data/RV

FACILITIES AND EQUIPMENT

OUR PROJECT CONSISTS OF TWO MAIN STAGES:

Stage 1

Mechanical treatment of the waste water, by removing the excess water, cleaning the sludge from all pathogens up to the stage of a clean and soil-textured product, as a base for the following stage.

Stage 2

Bio-Technological stage, during which the basic product is biologically treated to the desired final stage of organic fertiliser.

The maturation process occurs with insignificant energy costs. The mesophilic temperature regime can be maintained by utilising the heat from the pasteurisation furnace and/or the heat released by the bacteria itself. Bacterial strains are grown on site.

The odour from this process is weaker than the usual smell of sewage facilities, composting plants, or cattle farms and can be further filtered.

We proceed from the fact that the price of a product is determined by its quality, not origin. The main business targeting (in case of sludge treatment) are metropolitan cities, but our technology can be used not only for the sludge but for manure as well.

We look at municipal sludge as an immeasurable resource rather than a problematic waste product.

Thank you so much

for your interest and attention.

Please let us know if you have any questions.

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