# LIFE project: SOIL 4 LIFE

## LIFE Programme

*Deadline 14th September 2017* Sub-programme for Environment Priority area: LIFE Environmental Governance & Information

# Project Topic

Awareness-raising campaigns promoting sustainable consumption with a focus on the consumption of soil and land resources.

## **Background and rationale**

Soils are an essential and non-renewable natural resource hosting goods and services vital to ecosystems and human life. Soils are fundamental for producing crops, feed, fibre, fuel, and they filter and clean tens of thousands of cubic kilometers of water each year. As a major storehouse for carbon, soils also help regulate emissions of carbon dioxide and other greenhouse gases, which is fundamental for regulating climate. Soil Sustainable Managemet (SSM) is an integral part of sustainable land management, as well as a basis for addressing poverty eradication, agricultural and rural development, promoting food security and improving nutrition.

Soil is the world's largest terrestrial pool of carbon and approximately 95% of global food is produced in soil.

However, evidence recently provided in the Status of the World's Soil Resources (SWSR) report and other studies shows that about 33% of global soils are moderately or highly degraded4, 5, i.e. due to unsustainable management practices. On a global scale, an annual loss of 75 billion tons of soil from arable land is estimated to cost about USD 400 billion each year in lost agricultural production. This loss also significantly reduces the soil's ability to store and cycle carbon, nutrients, and water. Annual cereal production losses due to erosion have been estimated at 7.6 million tonnes.

Moreover, soil undergoes a number of degradation processes and is subject to various threats (European Commission, 2006, 2012a, Stolte et al., 2016) such as erosion; reduction of organic matter; contamination; sealing; compacting; biodiversity loss; salinization; desertification.

Soil, thus should be protected and the sustainable use of soil should be promoted in a way that this key resource can keep on maintaining its fundamental functions.

# Objectives

The project's **general objectives** are promoting the sustainable and efficient use of soil in Italy and Europe and improving the governance of the decisional processes according to the principles established by the World Soil Charter and the priorities set on the United Nations' "*Status of the World's Soil*" Report in the context of the *2030 Sustainable Development Goals*.

In particular, the projects promotes the dissemination and the broad adoption of the *Voluntary Guidelines for Sustainable Soil Management* (VGSSM) promoted by FAO.

#### Specific objectives

1) Improve the *governance* of decision-making processes at national, regional and local level by setting up a permanent consultation table amongst institutional stakeholders on Sustainable Soil Management.

2) Promote the reduction of land use in urban and territorial planning through the promotion of regeneration activities in brownfield areas, including through compensation schemes and urbanization allowances that allow for the replacement of existing greenfield expansions;

3) Provide decision makers with the necessary information on soil protection and with specific supporting tools for planning (e.g. adaptation and dissemination of the tool developed under the LIFE Soil Administration Models 4 Community project Profit - SAM4CP, for cost estimation for ecosystem services);

4) Establishing Regional Land Observatories on Land Use with monitoring tasks in connection with ISPRA, ARPA, APPA and the Soil Consumption Research Center (CRCS);

5) Increase knowledge and awareness of farmers on the key role of agriculture in soil protection and improving their commitment in protecting soil by adapting and disseminating the *Voluntary Guidelines for Farmers* on soil conservative agronomic practices;

6) Increase knowledge and awareness of professionals (agronomists, architects, geologists and geometers) by the dissemination of *Voluntary Guidelines for Soil Protection*;

7) Increase citizen consensus on policies for soil protection

# Results

- Establishing a permanent consultation table of institutional stakeholders (Specific Objective 1);
- Contribution to the definition of specific interventions to promote conservative soil practices in the discussion of new PSR measures with the Ministries involved (Specific Objective 1);
- Adoption of the *Charter of Principles for the Sustainable Use of Soil* by at least 20 Regional and Municipal Administrations (Specific Objective 2);
- Formal adoption by the Municipality of Rome of the *Municipal Plan for Permeabilization* (Objective 2);
- Adaptation of the tool realized under the LIFE Soil Administration Models 4 Community Profit -SAM4CP project for cost estimation for ecosystem services for at least X municipalities (Specific Objective 3);
- Activation of at least 10 Regional observatories on soil consumption (Specific Objective 4);
- 3 courses for trainers (regional CIA delegates) in as many areas as North, Central and South (Specific Target 5);
- 40 training courses for farmers (at least 2 per Region) made by CIA trainers (Specific Objective 5);
- 1000 trained farmers (Specific Objective 5);
- Involvement of at least 200 professionals (engineers, agronomists, architects, geologists, surveyors, etc.) who adopt the voluntary guidelines specific to their sectors (Specific Objective 6);
- Involvement of a thousand schools, 20,000 students and 2,000 teachers (synergy with the Fruits in Schools and Teaching Factories (Specific Objective 8);



## A. Preparatory actions

A.1 Actions Executive Plan

A.2 Research of best practices and existing policies at European and national level

A.3 Adaptation of the tool developed under the LIFE Soil Administration Models 4 Community Profit (SAM4CP LIFE13 ENV / IT / 001218)

A.4 Data collection for the pilot project in the Municipality of Rome

A.5 Data collection for the pilot project in the Lombardy Region

#### B. Core actions

- B.1 Awareness campaign for Public administrations
- B.2 Regional Observatories on Soil Consumption
- B.3 Awareness raising campaign for farmers

B.4 Awareness raising campaign for professionals (agronomists, architects, geologists and geometers, engineers)

- B.5. National and International awareness raising campaign for Citizens
- B.6 Pilot 1: Rome on soil consumption, cementing, de-sealing

B.7. Pilot 2: Lombardy - on organic matter reconstitution of agricultural soils

#### C. Impact monitoring

- C.1 Monitoring of the project impact on target groups and on the environmental problem
- C.2 Monitoring of the socio-economic impact of the project

#### **D.** Dissemination

- D.1 Dissemination planning and execution (Communication plan, media relations, etc.)
- D.2 Replicability

#### E. Project management

- E.1 Project management
- E.2 Project progress monitoring)
- E.3 External audit

## **Beneficiaries**

Coordinating Beneficiary: Legambiente

Associated beneficiaries: Ispra, Cia, Crea, Politecnico Di Milano, Ersaf, Comune di Roma,

# Budget

Around 3 milion euros out of which 60 % co-financed by the EU.