



PERÚ

Ministerio
del Ambiente



PEI POVERTY ENVIRONMENTAL INICIATIVE

INTEGRATED SOLID WASTE MANAGEMENT FOR
INCLUSIVE AND SUSTAINABLE DEVELOPMENT



INTRODUCTION

The people who depend on the environment the most are those living in poverty. In this context, improving environmental management directly contributes to poverty reduction, economic growth, generating sustainable livelihoods and the wellbeing of the people, including women and vulnerable populations. The Poverty and Environment Initiative (PEI) of the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UN Environment) helps countries integrate the links between poverty and the environment in development planning processes at the national and sub-national level in order to achieve the Sustainable Development Goals in the framework of the 2030 Agenda¹.

¹ For more information visit www.unpei.org



OUR PROJECT

WHAT IS OUR CONTRIBUTION IN PERU?

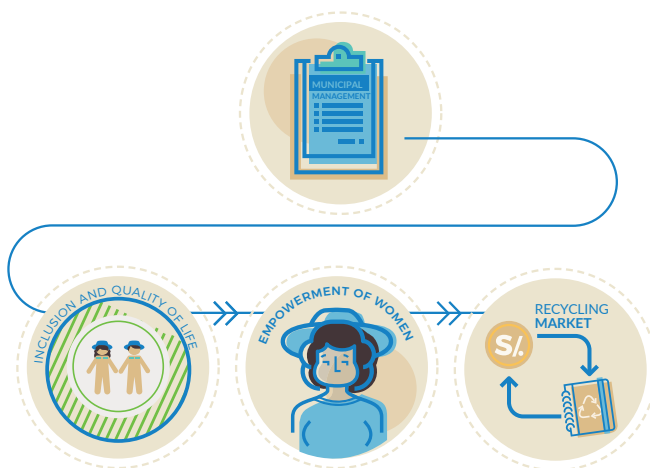
Since the end of 2013, PEI has worked in Peru through the project Integrated Solid Waste Management for Inclusive and Sustainable Development to influence public policy, plans and budgets from the solid waste sector through strengthening institutional capacities for an integrated management of solid waste, with a poverty and gender approach.



Photo: Sally Jabiel / PEI PERU

The project is led by the Ministry of Environment (MINAM) with technical assistance from UNDP and UN Environment, and implemented in partnership with the Provincial Municipality of Arequipa (MPA) and the United Nations Volunteers Programme (UNV).

At the local level, the project is involved in the Arequipa province in order to generated a sustainable municipal management model which contributes to the inclusion and improvement of the recyclers' quality of life, with a focus on the empowerment of women recyclers and the development of a recycling market model.

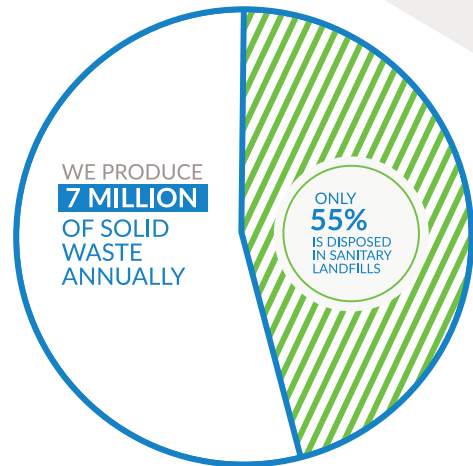


CONTEXT

SOLID WASTE MANAGEMENT

The increase in population, rapid urbanization and changing consumption patterns have accelerated the rate at which solid wastes are generated, turning this into one of the main planning challenges that Peru faces.

In Peru, solid waste generation reaches 7 million tons per year. Out of this total, only 55% are disposed in sanitary landfills, meaning the majority ends up in dumps, which affects the quality of the environment and the health of the population.



At the national level, there are a series of challenges, such as the constant rise in solid waste generation compared to the deficit in sanitary landfills; high amount of people not paying the service tax; and informal recycling chains which put recyclers' health at risk.



WHAT IS SOLID WASTE?

Legislative Decree No. 1278, Integrated Solid Waste Management Law

Any object, material, substance or element resulting from consumption or use of a good or service, that its owner gets rid of or has the intention or obligation to get rid of it, to be managed while prioritizing solid waste valuation, and its final disposal.

CHALLENGES





Photo: Sally Jabel / PEI PERU

On the other hand, formal recyclers influence an inclusive solid waste management at the national level, finding opportunities for sustainable development in waste. In this context, and as part of associations, they go to households and companies committed to recycling, collecting inorganic recyclable waste such as plastic bottles, cardboard and paper. The greatest challenge is then implementing a recycling value chain so that these wastes can be recycled adequately and formally.

It is in this context that the recyclers perform an important service in recovering recyclable material which, without this, would end up in a dump. At the national level, it is estimated that 108 thousand recyclers exist, of which less than 5% are formalized. This informality makes them an excluded collective which doesn't receive social recognition, despite the economic and environmental benefits that their work generates.

To face these challenges, PEI in Peru is supporting the transformation to an integrated solid waste management at the national, regional and local level, which articulates and consolidates inclusive strategies with poverty reduction, gender focus and youth aspects. In this way the initiative contemplates not only the improvement of environmental quality at the national level, but also the promotion of a circular economy model which generates opportunities for the most vulnerable population, through green jobs.



WHO ARE THE RECYCLERS?

Regulation of Law No. 29419 which Regulates the Recyclers' Activities

They are the people who, independently or not, are dedicated to selective collection activities for recycling, segregating and commercializing at a small scale, non-hazardous solid waste, in accordance with Law No. 27314 (General Solid Waste Law).

2 Ciudad Saludable (2010).
Por la ruta del reciclaje en el Perú.

RECYCLERS IN AREQUIPA

ENVIRONMENTAL AGENTS OF CHANGE³



14%
OF RECYCLERS
LIVE IN EXTREME
POVERTY³

7.6%

OF WOMEN RECYCLERS
LIVE IN EXTREME POVERTY

60%
EARN BELOW
500 SOLES
PER MONTH

(THE MINIMUM WAGE
IN PERU IS 850 SOLES)



IN THE AREQUIPA
PROVINCE



86%

ARE
WOMEN





68%

ARE BETWEEN 30
AND 59 YEARS OLD



AND 24% IS
OLDER THAN 60



44% DEDICATE
BETWEEN
21 AND 40 HOURS

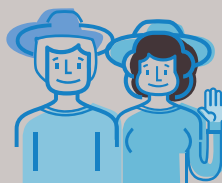


A WEEK TO
RECYCLING
WORK

Photo: Sally Jabiel / PEI PERU



CONTRIBUTIONS FROM RECYCLERS



Recyclers perform a public service unacknowledged, which contributes to reusing and recycling materials which would otherwise end up in open air dumps, rivers and oceans.



They recover materials like plastic, mixed paper, cardboard, glass and diverse metals.



Amount of solid wasted disposed in landfills are reduced, giving them added value with the challenge of creating a formal value chain.



They reduce the amount of natural resources used for the elaboration of products.

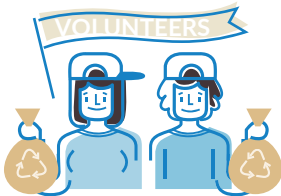
- 3 Municipalidad Provincial de Arequipa (2015). "Informe de encuesta socioeconómica de recicladores formales e informales de la ciudad de Arequipa según indicadores de género, pobreza y juventud."

OUR OBJECTIVES



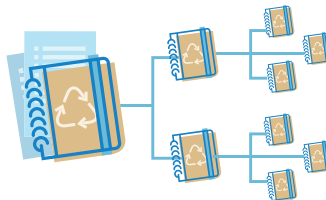
Creation of a regulatory environment that is more favourable and suitable in the solid waste sector, with the integration of social, poverty and gender variables at the national and subnational levels.

Promote and support recyclers associations in favourable conditions for financial sustainability, with an emphasis on the empowerment of women recyclers.



Raise awareness through volunteer actions in the Arequipa population in relation to waste segregation at source.


Generate knowledge and a replicable model of waste management at the national level based on these experiences and public policy tools.



Develop an infrastructure for solid waste valuation.

PILOT EXPERIENCE IN AREQUIPA





In Arequipa, 736 tons of waste are generated daily, which represents 270 thousand tons annually.

In the Arequipa province, pilot area for the PEI project, there are around 140 formal recyclers in 19 associations, 86% of which are women. In this way, the initiative supports the development of a more accessible and competitive recycling market which improves recyclers' wellbeing, with a special emphasis on empowering women recyclers. Furthermore, it creates an environmental culture by promoting segregation at source and recycling through volunteer actions.



EXPERIENCE OF CHANGE

- A. National and subnational public policy advocacy** for the integration of social, poverty, gender and youth variables in the solid waste sector of Peru, in national and subnational public policies, plans and instruments.
- B. Strengthening recyclers** through modules on social skills and empowerment of women, with support from the Ministry of Women and Vulnerable Populations.
- C. Environmental education and public awareness:** registration of new households for the segregation programme and delivery of raschel mesh bags, with which plastic consumption is avoided and costs for recycling associations are reduced.
- D. New selective collection routes:**
 - Residential route, systematized information in geographic information systems software.
 - Business route, where over 19 companies from the industrial park of the district of Arequipa participate.
 - Commercial route with over 90 shops from the Historic Centre of Arequipa.
 - School route, which recovers waste from the QaliWarma school feeding programme in 37 education institutions of the Alto Selva Alegre, Cayma and Miraflores districts, which have 13,305 students.
- E. Collection centre.** With an area of 400 m² given by the MPA, where waste from the selective collection of the AQP Recicla Programme is selected, stored and given added value. This centre has a PET mincing machine.
- F. Generation of added value in recyclable material.** With machinery and instruments used to elaborate paper, notebooks, wallets, coin holders, pins and cards with recycled materials, which are commercialized in fairs and diverse events.
- G. Commercialization.** With a greater understanding of the local market, greater competitiveness of the associations has been allowed, resulting in better prices and increasing their negotiating capacity through economies of scale.





OUR RESULTS

AT THE NATIONAL LEVEL

- Solid Waste Management National Plan (PLANRES) elaborated with a poverty reduction and social focus
- Including the gender focus and social inclusion in the Integrated Solid Waste Management Law.
- National Integrated Information System for Solid Waste Management (SIGERSOL) updated with social indicators

AT THE LOCAL LEVEL

- Elaboration of the Municipal Solid Waste Management Plan (PIGARS) of the MPA with a poverty and gender focus, which includes updating the solid waste management plans in the 29 districts of the province.
- Elaboration of solid waste characterization studies and other solid waste management instruments in the district of Arequipa.
- Study of the solid waste recycling market of the Arequipa province elaborated and business plans proposed.



Photos: Sally Jabiel / PEI PERU

- Expansion of formal, commercial and business collection routes of the AQP Recicla Programme, with the launch of the collection centre and ability to transport waste.
- 70,000 citizens' awareness raised on the recycling culture
- 13,305 students from elementary educational institutions committed to recycling through the PEI-QaliWarma partnership.
- 90 shops in the historic centre and 19 businesses from the industrial park actively participate in the segregation of waste in Arequipa.

- 300 volunteers mobilized, equal to 15 000 certified environmental volunteer hours.
- Formalized 37 recyclers in 4 recyclers associations.
- 83% of the recyclers associations in Arequipa led by women.
- 170 recyclers (42 men and 128 women) with personal and organizational capacities strengthened.



PROGRAMME DONORS





PERU
Ministerio
del Ambiente



MUNICIPALIDAD PROVINCIAL
DE AREQUIPA



UN
VOLUNTEERS

UN 
environment



UN
DP

Empowered lives.
Resilient nations.

More information: www.unpei.org // www.pe.undp.org // www.minam.gob.pe