ASSESSING THE ROLE OF CITIZEN PARTICIPATION IN A TRANSITION TOWARDS AN INCLUSIVE SOLID WASTE MANAGEMENT

A CASE STUDY OF THE COTACACHI CANTON IN ECUADOR

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Assessing the Role of Citizen Participation in a Transition towards an Inclusive Solid Waste Management: a Case Study of the Cotacachi Canton in Ecuador.

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In the endeavor of addressing the social and environmental demands from the people at the local level, the representative democracy approach used by governments has faced shortcomings. This has attracted attention from academics and authorities whom opted for exploring different methods of decision-making with a participatory and more inclusive perspective. Experiences in solid waste management (SWM) in developing countries exemplify how participatory and inclusionary approaches facilitate to overcome these challenges. However, using the word “participation” in governments’ planning and policy-making agendas does not depict the same understanding among authorities and civil society. A case study in the Municipality of Cotacachi, located in the highlands of Ecuador, was conducted with the aim to analyze the role citizen participation in a transition towards an inclusive SWM. Characterizations of the participatory process and the SWM of Cotacachi were carried out in the light of the Empowered Participatory Governance (EPG) theory and the Multi-level Perspective (MLP) respectively. Interviews, observations, and literature review shown that Cotacachi’s citizens see participation as a synonym of attaining higher levels of decision-making power. Yet when it comes to the SWM issue, the citizens perform low levels of participation, being this promoted by a top-down and technocratic municipal strategy. This fact hinders the inclusion of individuals and groups that are contributing to raise awareness and lessen the quantity of solid waste that reaches the landfill. It is suggested that connecting the current situation of the SWM with the participatory process of Cotacachi represents an opportunity to what the MLP labels as a sustainable transition, thus strengthening the cooperation between citizens and authorities in the SWM governance.

**Keywords:** participation, solid waste management (SWM), Empowered Participatory Governance (EPG), Multi-level Perspective (MLP), Cotacachi, participatory process.
En el esfuerzo de atender las necesidades sociales y ambientales de la población a nivel local, aquellos gobiernos que priorizaron la democracia representativa han demostrado limitaciones en su gestión. Esto ha llamado la atención de investigadores y autoridades quienes han optado por explorar diferentes métodos para tomar decisiones con un enfoque participativo e inclusivo. Experiencias sobre el manejo de residuos sólidos (MRS) en países en desarrollo ejemplifican cómo un enfoque participativo e inclusivo facilita la resolución de problemas de este tipo. Sin embargo, utilizar la palabra “participación” en planes de gobierno y agendas de planificación arroja significados distintos entre autoridades y sociedad civil. Se llevó a cabo un estudio de caso en el cantón Cotacachi, ubicado en los Andes Ecuatorianos, con el objetivo de analizar el rol de la participación ciudadana en la transición hacia un MRS inclusivo. Se realizó una caracterización del proceso participativo y del MRS de Cotacachi; la teoría de la Gobernanza Participativa con Empoderamiento y la Perspectiva Multinivel fueron utilizadas respectivamente para tales caracterizaciones. Entrevistas, observaciones y revisión bibliográfica demostraron que los habitantes de Cotacachi ven a la participación como un sinónimo de alcanzar niveles más altos de poder para tomar decisiones. No obstante, respecto al MRS, la ciudadanía describe bajos niveles de participación impulsados por un manejo “de arriba hacia abajo” (top-down) y tecnocrático. Esto hecho dificulta la inclusión de individuos y grupos que contribuyen a crear conciencia y evitar que más residuos sólidos lleguen al relleno sanitario. Se sugiere que el conectar la situación actual del MRS con el proceso participativo de Cotacachi representa una oportunidad que la Perspectiva Multinivel la conoce como transición sostenible, lo que permitiría fortalecer la cooperación entre las autoridades y la ciudadanía en la gobernanza del MRS.

**Palabras clave:** participación, manejo de residuos sólidos, Gobernanza Participativa con Empoderamiento, Perspectiva Multinivel, Cotacachi, proceso participativo.
Being in the right place at the right time, 
meeting the right people at the right moment, 
reading the right texts when needed... 
Some people call that ‘good luck’, 
others call it ‘destiny’, 
I call that ‘God’s Will’

Certain personal experiences in the last ten years have raised my interest on citizen participation and civil engagement on public concerns. In some cases I played the role of participant, in other cases I attempted to engage others to join, but always pursuing to raise awareness regarding environmental challenges that humans are facing nowadays. However, this face-to-face academic experience with participatory issues has been quite revealing to me. Certainly it has been a learning process, not only because it entails the management of theoretical concepts, but also because of the living testimonies that bring participation into action and I had the privilege to talk to.

In this way, I want to thank the people who without expecting anything in exchange shared time, experience, and knowledge with me. To Hugo Robalino, a vivid example of commitment in the endeavor of legitimizing the citizen participation in Cotacachi. To Ana Cristina Flores and Dany Andrade, for their important support and constant willingness to help with information and finding interviewees. To Alicia Guaján, for sharing time with me and demonstrating that we should not fear to swim against the current in open debates. To Don Leo and Doña Cumandá, who through long talks and experiences shared made me realize that the field phase of the thesis is more than only going out and do interviews and observations. To my uncle Francisco and aunt Lorena, for all the support, contacts, and the time shared as a family in Cotacachi. To all the people I had the honor to interview, thanks for the time, thoughts, and feelings shared. I also want to thank my supervisor Marleen, her questions and call for reflection pretty much shaped and gave sense to this report. Additionally, I want to thank to Piotr Chomczynski, Santiago Albán, David Arcentales, and Sebastián Orellana, who carefully reviewed my drafts; their comments and suggestions were key for this report. To my family, their support from home is always crucial in every life project I ran into. To Sophie, for being more than a company during this life experience, hoping that such company does not get to an end. Finally, to all the inhabitants from Cotacachi who believe and practice participation regardless the adversities; we have so much to learn from them.
1. INTRODUCTION

“[…] but then I say, why do not we try to share that power? Share, co-govern, it would save us time, money, and even help us being more effective in fostering development.”

Interview with Auki Tituaña, December 2014

The increasing complexity of the tasks to be overcome by governments has suggested that the current practices of **representative democracy**, where authorities are elected and have the power to take decisions upon public interest issues, is not addressing properly the diversity and specificity of the needs at local level (Fung and Wright, 2003; Healey, 2006). The renowned term of **(good enough) governance**¹, used as a guiding principle of development agendas especially in developing countries, tries to address the wide range of needs and interests that stakeholders (civil society, private, and public sector) have over an specific topic. Thus, it is recommended to implement governance with a more inclusive and context-understanding approach (Grindle, 2004; Healey, 2006).

In the endeavor of enhancing the inclusiveness of the actors’ perspectives in the planning and policymaking processes, the **Collaborative Planning** theory suggests that it should be understood as a “redistributive process” (Allmendinger, 2009: 220). This means that besides gathering the parties’ interests and providing a physical and legal space to express them, some level of power is delivered to the civil organizations (Arnstein, 1969; Fung and Wright, 2003). In this way, ordinary people can have access to legally established institutional spaces of deliberation upon policies that would affect their lives, being this called **Empowered Participatory Governance** (EPG) by Fung and Wright (2003). Additionally, bringing people together in order to discuss common concerns has several benefits. These benefits can be articulated individually and collectively. For instance, raising awareness of the fact that we are free individuals with right and duties, and as we participate, we also feel that we are part of the community (Pateman, 1970). Nevertheless, does implementing participatory process as a governance tool ensure that development goals will be achieved? An example of a development goal for the government of Ecuador is to eliminate the municipal solid waste open air dumps until 2017, stating that participation and engagement of civil society are key components of such goal (Ministerio de Ambiente del

¹ The World Bank (1992: 1) defines governance as “the manner in which power is exercised in the management of a country’s economic and social resources for development”. Furthermore, the term **good governance** is also mentioned in response to the failure of governments’ actions when implementing the programs and projects, suggesting that laws should be enforced consistently in order to deliver the aimed outcomes (World Bank, 1992). However, good governance is criticized because the lack of guidance provided in terms of setting priorities, time and space feasibility scales and solving the governance gaps rather than giving attention to what is working at a local level (Grindle, 2004). Hence, Grindle (2004) addresses the term **good enough governance** that attempts to enhance the government performance and engage the civil society, paying attention to the local particularities and setting priorities that would adjust the development agendas to the local contexts.
Ecuador, 2012). The key word in the last statement is “participation”, being a challenge for local
governments at the moment of converting such concept into programs and projects.

There have been worldwide cases where governments have failed to address basic services like
the solid waste management (SWM) within their jurisdiction. Privatization has been used to
improve not only the service, but the image to the public and government structure (Adama,
2012; Bjerkli, 2013). For example, the attitude of ‘no payment, no service’ of the private sector
made the people from Addis Ababa in Ethiopia opt dumping the garbage in rivers and open fields
(Bjerkli, 2013). Moreover, the lack of waste collection service gave place to the informal collection
activity\(^2\), which is still considered illegal by some planners in Africa (Adama, 2012). In contrast,
Bari et al. (2012) and Paul et al. (2012) see this informal waste collection as a positive
phenomenon in Rajshahi (Bangladesh) and Iloilo City (Philippines) respectively. They argue that it
represents job opportunities and creates social relations between civilians and enterprises
dedicated to process recyclable waste. It seems like the governments (or the people who run
them) that pay enough attention to the local contexts, define priorities, recognize government
institutional capabilities, and consider the people as key partners are more likely to successfully
address issues like the SWM (Grindle, 2004; Adama, 2012). However, to what extent are the
different levels of government putting into practice these governance features? If we relate SWM
to the participatory planning principles, how are governments delivering power to the civil
stakeholders in this matter? These questions attempt to find answers that can help to understand
the failures and successes that (participatory) governance practices generate when they are
applied on specific issues like SWM.

The Cotacachi canton\(^3\), located in Ecuador (Figure 5), properly fits as a case study to address these
questions. Since 1996, organizations from the civil society of Cotacachi have periodically
and discussed about public concerns namely tourism, environmental conservation, women
empowerment, etc. The aim of these meetings among actors from the civil society is to generate
resolutions that advice, request, and claim civil rights, as well as suggest the steering of the
cantonal development. The term used to refer such citizen participation phenomenon is the
participatory process, widely used by the locals from Cotacachi. In a book published in 2004,
Santiago Ortiz makes an analysis of the participatory process of Cotacachi which had seven years
of existence by then. He points out that the organizations of the civil society and their social
dynamics can be seen as autonomous from the central and local government in terms of decision-
making practices. He also adduces this as the main driver to achieve the canton transformation\(^4\),
fostered by the municipal willingness to create such deliberative space. However, several things
have happened since then. One of the most striking ones was the change of political leaders in
the local administration and all the consequences that this could have for the participatory
process. Moreover, the current SWM in Cotacachi is facing problems as it was evidenced on the
field (e.g. nearly collapsing landfill). Nevertheless, some inhabitants’ activities and livelihoods

\(^2\) The informal labeling used for those activities related to collecting, recycling and recovering waste
responds to the fact that the people who perform them are not recognized as part of the official (municipal)
or formal solid waste management (van Buuren et al., 2014). They are also known as the informal waste
sector (Paul et al., 2014) or informal recycling systems (Sasaki and Araki, 2014).

\(^3\) The territory of Ecuador is organized into Regions, Provinces, Cantons and Rural Parishes; the state
government level that corresponds to a canton is the Municipality (República del Ecuador, 2010a). More
details of the territory organization and the Cotacachi canton location are provided in the section 3.7.

\(^4\) With transformation, Ortiz refers to improvements in infrastructure and social values like identity,
involvement and civil right recognition and demand; putting into his words, “[...] there was a process of
democratization of the democracy in the local context” (Ortiz, 2004: 192).
related to solid waste have potential to generate successful outcomes in terms of social inclusion\(^5\) and less waste going to the landfill. Both the participatory process of Cotacachi and the activities related to SWM performed by citizens create the scenario of what the Multi-level Perspective (MLP) labels as a *sustainable transition* (Geels, 2011). For the purpose of this study, a sustainable transition will be defined as the shift from a top-down and technocratic SWM towards an inclusive and participatory SWM. Therefore, this research is focused on analyzing the role of citizen participation in the transition towards an inclusive SWM in Cotacachi; a case study research design was used for the purpose of this study.

### 1.1. Research Problem

Having read that thanks to the participatory process, the Cotacachi canton achieved somehow a social transformation and infrastructural improvements, made me wonder whether the topic of SWM has been ever discussed or is actually under discussion. Short preliminary conversations\(^6\) with the people from Cotacachi in the time that I was designing the research shown me that the canton is having problems related to the waste collection system in the rural areas and final disposition in the whole territory. Furthermore, I was told that the current participatory process performed by the organized civil society is not addressing the SWM. Additionally, studies about SWM in cities around the world mention several elements that impede achieving an inclusive approach. One of those elements is the fact that the informal collection activities are seen as illegal (Adama, 2012; Paul et al., 2012), or simply that they are not recognized as part of the official SWM (van Buuren et al., 2014). It can be that the authorities of Cotacachi who are in charge of the cantonal SWM are not aware or disapprove the informal waste collection activities. Therefore, the research problem addresses the absence of the SWM issue in the participatory process of Cotacachi, being this a missing opportunity to achieve an inclusive SWM throughout the canton.

### 1.2. Objectives

The purpose of this study was to analyze the role of the citizen participation in the transition towards an inclusive SWM in the Cotacachi canton. As for the concern of this study, solid waste management includes: the practices that the Municipality does, the ways solid waste is used by ordinary people either for profit or educational purposes, and how these activities are seen by each other. For the purpose of this study, citizen participation has a twofold meaning. First, citizen participation addresses the role of citizens in the cantonal decision-making process (also referred as participatory process). Second, citizen participation refers also to the role of the inhabitants in the SWM of Cotacachi. Thereby, three specific objectives were set in order to achieve the main objective. (1) Characterize how the participatory process of Cotacachi work. (2) Characterize how

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\(^5\) For the purpose of this study, the word *inclusion* refers to the municipal authorities and social acceptance of the *informal* collectors as part of the solid waste management system. Paul et al. (2012) uses the word *integration* when addressing this situation.

\(^6\) Skype meeting with the President of the AUCC and e-mails with the Director of the Planning Department and the Director of the Environmental Department of the Municipality.
the solid waste management (SWM) of Cotacachi work. (3) Evaluate the inclusion of the informal collectors into both the municipal SWM and cantonal participatory process.

Therefore, to achieve the aforementioned objectives, theories that address participation and describe transitions were used. These theories guided the research questions setting, data collection, data analysis, and illustration of recommendations for action. This approach is referred as “theoretical lens” by Creswell (2014: 64).

1.3. OUTLINE OF THE THESIS

After having provided the problem and objectives as an introduction, the second chapter addresses the theoretical framework. The Empowered Participatory Governance (EPG) theory, the Multi-level Perspective (MLP), typologies of participation, and principles of the Collaborative Planning theory are described and aligned to the purpose of this study. The research questions come at the end of this section, being these informed by the theories used in this study.

The third chapter specifies the methodology. A case study was used as a design method, being the reasons specified in the beginning of the chapter. Also details about the data collection methods (literature review, interviews, and observations) and analysis are mentioned. Four elements that acknowledge my position as a researcher are also part of this chapter in the section named Positionality. The last section describes the study area; geographical and demographical facts form Cotacachi are mentioned.

The fourth chapter comprises the results of this study. Ecuadorian legislation on citizen participation and a brief political context is provided as a background information to understand where the participatory process of Cotacachi stands on. Then the participatory process of Cotacachi is characterized under the EPG theory, followed by the characterization of the solid waste management (SWM) under the three levels of the MLP (regime, niche, and landscape).

The fifth chapter belongs to the discussion of the results where the answers to the research questions are addressed. Two main sections aim to give a meaning to the findings in the light of the theories and other studies upon participation and SWM. The conclusions and recommendations are synthetized in the sixth chapter, followed by a list of references and closing the report with annexes.
Theories and concepts are described in this chapter as lenses that guided the rest of the steps of the research: writing research questions, design and choice of the appropriate data collection methods, analysis of data, and finally, orientate for a call of action through conclusions and recommendation (Creswell, 2014). Thus, as mentioned in the objectives section, the issues to be examined are (1) the participatory process, (2) the solid waste management (SWM) of Cotacachi, and (3) the inclusion of informal collectors into both the municipal SWM and participatory process. Two theories constitute the main structure of this report: the Empowered Participatory Governance (EPG) from Fung and Wright (2003) and the Multi-level perspective (MLP) from Geels (2011). The first one addresses seven features that elaborate around the principles, structure, and requirements to envision a participatory governance case (the participatory process of Cotacachi). The second one uses three levels to explain the conditions required to visualize and attain a sustainable transition (section 2.3), which for the Cotacachi case would represent to achieve an inclusive SWM. Additionally, insights from the Collaborative Planning theory (Healey, 2006) and typologies that portray levels of participation are used to enrich the analysis and discussion of the field findings; for the purpose of this research; these are called “supportive theories”.

**FIGURE 1. THEORETICAL FRAMEWORK USED FOR THIS STUDY**

Figure 1 depicts the theoretical framework used for this study. The figure shows in a more simple way the relation between the theories and the issues to be analyzed. The aim to use mainly two theories (EPG and MLP) as structure for this thesis is to find the appropriate combination of concepts that can facilitate the achievement of the objectives. Hence, each objective is addressed by more than one theory, but at the same time, one theory dominates when addressing each
In that way, each theory complemented each other throughout the study. For example, the EPG could be used to characterize the participatory process and the SWM of Cotacachi. Yet, the complexity of the SWM issue surpasses the EPG scope. The reason is because the EPG theory addresses institutions and civil organizations’ participation in the decision-making process of public concerns. Thus, as it is shown in the coming chapter, the SWM issue in Cotacachi goes beyond the local government realm, involving several stakeholders who perform activities that are outside the municipal SWM. Therefore, the MLP better fits for the characterization of the SWM of Cotacachi since it involves “[…] technology, policy, markets, consumer practices, infrastructure, cultural meaning, and scientific knowledge” (Geels, 2011: 24). Nevertheless, the details of citizen participation enlightened by EPG theory represent important elements within the levels of the MLP. Thus, the outcomes of the EPG enrich the characterization of the cantonal SWM and even inform about the driving force that can lead to the transition.

2.1. EMPOWERED PARTICIPATORY GOVERNANCE (EPG)

Governance can be defined as “(...) the process through which collective affairs are managed” (Healey, 2006: 206). However, what does it mean governance for the purpose of this study? Within the Collaborative Planning approach, Patsy Healey (2006: 337) points out that governments and policy makers should practice a governance that pursues the inclusion of stakeholders in just and sustainable conditions, “[…] rather than the technical-instrumental rationality and rational planning process”7. Hence, the development of policies and delivering of programs should stick to this principle, suggesting to give special attention to the power relations among the stakeholders, who are participating, in what, and for whose benefit (Arnstein, 1968; Healey, 2006; Cornwall, 2008a).

This introduces the first concepts of the Empowered Participatory Governance (EPG) theory, which explores “[...] whether the reorganization of formal state institutions can stimulate democratic engagement in civil society, and so form a virtuous circle of reciprocal reinforcement” (Fung and Wright, 2003: 15). Thereby, the three principles, three institutional design features and enabling conditions of the EPG theory are presented below. The seven feature of the EPG theory are used to characterize the current state of citizen participation of Cotacachi.

Three EPG principles:

a) Practical Orientation

This principle means that the created governance structures deal with specific and concrete topics that concern citizens. Fung and Wright (2003) mention that these experiments – as they call to the participatory processes under the EPG model – are often linked to political parties, however, always targeting practical problems.

b) Bottom-up Participation

The EPG cases involve the participation of all kind of actors who are usually “[...] the most affected by targeted problems – typically ordinary citizens and officials in the field – […]” (Fung and Wright,

7 These two concepts refer to base the planning and decision-making process on scientific, experts and technocratic knowledge (rationality), diminishing value to the local, cultural and experienced based knowledge and ways of thinking (Healey, 2006; Allmendinger, 2009).
Without diminishing the experts’ role on the problem solving processes, two reasons are presented why these ordinary citizens should take part on the solutions formulation. First, they claim that citizens and field operators have a diverse experience, knowledge, and more open mind than experts. Secondly, this direct participation increases accountability and transparency, reducing bureaucracy (Fung & Wright, 2003).

### c) Deliberative Solution Generation

This principle entails the fact that on an EPG model, deliberation must have place in the solution generation process, rather than command (power in managers, bureaucrats, and experts), aggregation (voting), and strategic negotiation (decision-making procedure based on resources and power from a group of actors) (Fung & Wright, 2003). It should be acknowledged that the real-life discussion and deliberation processes are time consuming, energy demanding, and even conflictive, having winners and losers in terms of individual interests, but also it brings benefits for individuals and the collective in terms of social integration (Pateman, 1970; Fung and Wright, 2003; Healey, 2006). However, open deliberation is vulnerable to manipulation practiced by participants who have some level of power (Fung & Wright, 2003), expressed in the discourses used by the actors in such spaces when expressing (truth?) knowledge that can easily influence the others minds (Hall and Gieben, 1992; Healey, 2006; Allmendinger, 2009).

The fact of performing deliberation upon common concerns has an extended and vast theoretical background that collects contributions from the thinkers Anthony Giddens and Jürgen Habermas. The former elaborating around the fact that even though we are individuals with characteristics that make us unique and different, we belong to a society which context influence our lives and vice versa, being this named the theory of structuration (Healey, 2006). The second one tries to “reconstruct the unfinished project of modernity” through the communicative rationality or action, which entails the interaction of actors, not those who are experts, but the ones who have a stake on the issue under discussion (Dryzek 1990, in Allmendinger, 2009: 203). These two theories in combination provide ground for a normative approach that Healey (2006: 69-71) condenses in three criteria. The first one has to do with the fact of creating social capital and common sense by learning during policy development and debating upon common concerns. It means that the deliberative process can also be seen as a learning process and raising of awareness among the citizens who take part in it. The second criterion addressed by Healey (2006) suggests that, as the result of the first criterion, public policy reflects more accurately the local context because it gathers historical and current facts and claims identified by the inhabitants. The third criterion implies the endeavor of reaching and including all the actors who have a stake (or interest) on the topic to be discussed since they gather knowledge acquired through experience or they may result affected by a measure to be taken. The last criterion can also be related to the second principle of the EPG theory, which addresses the participation of all kind of actors who have interests on the issued under discussion.

The three EPG institutional design features:

#### a) Devolution

The fact of having an EPG experiment that addresses a specific topic in a social or geographical dimension, entails a reorganization of the governments at distinct levels in such a way that...
political power is devolved to the individuals or organizations whom conform this EPG. The reorganization of governments comprises also devising and implementing solutions and the respective accountable system (Fung & Wright, 2003). In the concluding section of the chapter named “Collaborative Planning” from the book “Planning Theory” of Philip Allmendinger (2009: 220), he uses the words “redistributive activity” when referring to a participatory planning process. Hence, if planning is about deciding what to do at present envisioning the future, then some degree of power is redistributed or devolved to whoever takes part of the participatory process (Arnstein, 1969; Fung and Wright, 2003).

b) Centralized Supervision and Coordination

Fung and Wright (2003: 21) define this institutional design feature as the “coordinated decentralization” yet not autonomous behavior that an EPG should perform. This means that two extremes are avoided. The first one is a democratic centralization that can fail on non-recognition of local circumstances. The second one is a strict decentralization which can lead to isolate the citizens from a broader context. Therefore the aim is to establish accountability linkages between the local units and the superordinate bodies. Even though the concept of autonomy is addressed within this institutional design feature, it is an issue that carries a lot of meaning for the Cotacachi participatory process and its actors, as it will be further presented. As an indirect critic to this EPG feature, Schonleitner (2006) exposes a threat by stating that municipal authorities tend to allocate allies within representative seats, which could happen if the centralized supervision and coordination is too influenced by power holders. Therefore, a definition of autonomy is not provided here, thus it will be elaborated considering what it means for the Ecuadorian legislation, what the (EPG) theory states, and what the actors express about it.

c) State-Centered, Not Voluntaristic

With state-centered, Fung and Wright (2003: 22-23) refer to the fact that these experiments of EPG should “[...] colonize state power and transform formal governance institutions”. The authors compare this feature with the not less important but not as efficient activist (voluntaristic) efforts, which actually get to influence decisions but with a pressure coming from outside. Through the state-centered approach, the EPG examples can harness the power and resources in order to give place to a positive feedback. It means that once in power positions, individuals and/or organizations can institutionalize the ongoing participation and bring more civilians to the participatory process. These EPG experiments carry a more radical approach since they attempt to change central procedures of power, reconstituting decision process within the state institutions. Democratic processes related to election of new authorities are not considered part of this institutional characteristic; they seem to be brief and outcome-oriented, being contrary to a sustained participation since legislation, decision-making, and implementation occurs in an isolated sphere.

Enabling conditions for an EPG

The most important basic condition defined by Fung and Wright (2003) is the equity of power among the actors of the participatory process. It is not referred only to the fact of having all the citizens under the same level of power, but also to make them feel in that way so they are encouraged to take part. In the aim of such requirement, the participants should be aware that no matter what is their background, experience, expertise or lack of it, their voice would be heard. The authors raise the issue of literacy in order to illustrate the balances of power between the actors and their willingness to be part of such process (Fung & Wright, 2003).

The fact of using the EPG framework to guide the field inquiry and data analysis represents a limitation for the study itself since it does not cover “elements of contestation” recommended
by Dryzek (2005, in Cornwall, 2008b: 528). These elements of contestation are: rhetoric, testimony, performance, gossip and even jokes among the actors, that occur outside the deliberative spaces in more informal arenas. Moreover, Cornwall (2008b) also addresses the fact that deliberation is a process, which could take place in different spaces, and what people bring to formal deliberative spaces might have different origins and already agreed resolutions; this issue was also not taken into account.

2.2. TYPOLOGIES OF PARTICIPATION

This section cites three authors whom describe the participation form different perspectives like the degree at which the citizens receive power to take decisions (Arnstein, 1969), the citizens participation performance per se (Pretty, 1995) and the participation that responds to the interests of the participants and proponents (White, 1996). These tools are known as typologies of participation (Cornwall, 2008a), which for the purpose of this study will help in the characterization of the participatory process and the SWM of Cotacachi. As mentioned in the beginning of this chapter, these typologies are used as supportive theories (Figure 1); they will help to understand the levels and kinds of participation that the citizen of Cotacachi perform within the scope of this study.

2.2.1. LADDER OF CITIZEN PARTICIPATION OF ARNSTEIN

This typology of participation is maybe the most known. Even though it was published in 1969, it still retains relevance nowadays (Cornwall, 2008a). The ladder of participation depicts levels (or rungs) of participation, which should be understood as degrees at which the power is given or devolved to the citizens. Therefore this typology complements the analysis guided by the first institutional design feature from the EPG theory: devolution (section 2.1). Additionally, this typology helps to reflect the extent to which the citizens of Cotacachi perform participation within the SWM regime and the niche level. The eight rungs of the ladder have been grouped in three sets (Figure 2) from low to high levels of participation: the non-participation, the tokenism and the citizen power (Arnstein, 1969). The first one includes manipulation and therapy; where citizens are not meant to participate and power holders opt for educate the public. The second one has three rungs, informing, consultation and placation, which allow the citizens to get to know what is under discussion and even have a voice; however, they do not hold the power to convert their opinions into decisions. The main difference between consultation and placation is that the later implies the citizens to exert a certain degree of influence (e.g. having seats on citizen councils), whereas in consultation, it is not ensured that the citizen’s ideas will be taken into account. The third group has three rungs: partnership, delegated power and citizen control, which at a different degree, they give power to the civilians in order for them to take part in the decision-making process. Partnership is characterized by an agreement between citizen and power holders on share planning and decision-making responsibilities; usually citizens are organized and conform boards that are accountable to whom they represent. In delegated power, the agencies or groups of citizens have the majority to take decision upon a certain issue at the point where the authorities would need to bargain in order to see their suggestions to be implemented. Citizen
power is the highest level or participation, where citizens govern a program or institution being in full charge of policy and managerial aspects.

![Figure 2. Ladder of Citizen Participation (Arnstein, 1969)](image)

**2.2.2. Pretty’s Typology of Participation**

Jules Pretty (1995) presents seven levels of participation after an analysis of how state agencies and NGOs have used and introduced the public participation in agricultural matters. He is critical towards the fact that under the name of “participation”, state control has been justified, and even it has been a tool for data collection and interactive analysis. Moreover, he criticizes the incentives approach to engage citizens for participation, which creates dependency and biases the people’s minds. Nevertheless, Pretty also remarks that using participation as a guiding concept in community development has increased local capacity and self-reliance, and it has devolved power to civil society. As Arnstein’s ladder of citizen participation, Pretty’s typology can also be understood as the levels of power devolved to civil society. For example, the “interactive participation” from Pretty’s typology, and the “partnership” from Arnstein’s typology address that decision cannot be made in a unilateral way. However, scaling up in the levels of participation from both typologies, differences can be noticed. Arnstein’s “citizen power”, the highest level of participation, is still described as a transference of power or financial resources so the civil organizations have the control over the situation. In contrast, Pretty’s “self-mobilization” level focuses on the independency of initiatives that citizens take in order to find resources and build up their own networks (Table 1). When it comes to analyze issues like (informal) SWM, where people is able to take decision without any sponsorship or consent, the “self-mobilization” Jules Pretty is more accurate.
TABLE 1. JULES PRETTY’S TYPOLOGY OF PARTICIPATION (1995: 1252)

<table>
<thead>
<tr>
<th>Typology</th>
<th>Characteristics of each type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manipulative participation</td>
<td>Participation is simply a pretense, with “people’s” representatives on official boards but who are unelected and have no power.</td>
</tr>
<tr>
<td>Passive participation</td>
<td>People participate by being told what has been decided or has already happened. It involves unilateral announcements by an administration or project management without any listening to people’s responses. The information being shared belongs only to external professionals.</td>
</tr>
<tr>
<td>Participation by consultation</td>
<td>People participate by being consulted or by answering questions. External agents define problems and information gathering processes, and so control analysis. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to take on board people’s views.</td>
</tr>
<tr>
<td>Participation for material incentives</td>
<td>People participate by contributing resources, for example, labor, in return for food, cash or other material incentives. Farmers may provide the fields and labor, but are involved in neither experimentation nor the process of learning. It is very common to see this called participation, yet people have no stake in prolonging technologies or practices when the incentives end.</td>
</tr>
<tr>
<td>Functional participation</td>
<td>Participation seen by external agencies as a means to achieve project goals, especially reduced costs. People may participate by forming groups to meet predetermined objectives related to the project. Such involvement may be interactive and involve shared decision-making, but tends to arise only after mayor decisions have already been made by external agents. At worst, local people may still only be coopted to serve external goals.</td>
</tr>
<tr>
<td>Interactive participation</td>
<td>People participate in joint analysis, development of action plans and formation or strengthening of local institutions. Participation is seen as a right, not just the means to achieve project goals. The process involves interdisciplinary methodologies that seek multiple perspectives and make use of systemic and structured learning process. As groups take control over local decisions and determine how available resources are used, so they have a stake in maintaining structures or practices.</td>
</tr>
<tr>
<td>Self-mobilization</td>
<td>People participate by taking initiatives independently of external institutions to change systems. They develop contacts with external institutions for resources and technical advice they need, but retain control over how resources are used. Self-mobilization can spread if governments and NGOs provide an enabling framework of support. Such self-initiated mobilization may or may not challenge existing distributions of wealth and power.</td>
</tr>
</tbody>
</table>

2.2.3. PARTICIPATION BASED ON INTERESTS

As an echo of the previous two typologies exposed, Sarah White (1996) also critics the ways participation has been used hitherto. She questions whether the fact of attending to such participatory process would guarantee that the citizens’ concerns would really be heard. Thus, she is stating the difference between the fact of “sharing through participation” and “sharing in power” (White, 1996: 6). Therefore, her typology of participation is based on the interest of those who are (meant to be) involved in the participatory processes, giving special attention to who is participating and at which level. This typology is also used to enrich the description of the
Theoretical Framework

Cotacachi participatory process and the citizens’ role in the SWM regime of the canton. Table 2 shows the details of this typology of participation.

**TABLE 2. WHITE'S TYPOLOGY OF PARTICIPATION** *(1996, IN CORNWALL, 2008a: 273)*

<table>
<thead>
<tr>
<th>Form</th>
<th>What ‘participation’ means to the implementing agency</th>
<th>What ‘participation’ means for those on the receiving end</th>
<th>What ‘participation’ is for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal</td>
<td>Legitimation – to show they are doing something</td>
<td>Inclusion – to retain some access to potential benefits</td>
<td>Display</td>
</tr>
<tr>
<td>Instrumental</td>
<td>Efficiency – to limit funders’ input, draw on community contributions and make projects more cost-effective</td>
<td>Cost – of time spent on projects-related labor and other activities</td>
<td>As a means to achieving cost-effectiveness and local facilities</td>
</tr>
<tr>
<td>Representative</td>
<td>Sustainability – to avoid creating dependency</td>
<td>Leverage – to influence the shape to project takes and its management</td>
<td>To give people a voice in determining their own development</td>
</tr>
<tr>
<td>Transformative</td>
<td>Empowerment – to enable people to make their own decisions, work out what to do and take action</td>
<td>Empowerment – to be able to decide and act for themselves</td>
<td>Both as a means and end, a continuing dynamic</td>
</tr>
</tbody>
</table>

2.3. THE MULTI-LEVEL PERSPECTIVE (MLP)

Geels (2011) explains that **sustainable transitions** are those structural changes that pursue the overcoming of environmental challenges. Such structural change entails the understanding of environmental innovations’ emergence that could replace, transform, and reconfigure existing systems. Hence, Geels (2011: 25) states that sustainable transitions are the “[…] interactions between technology, policy/power/politics, economics/business/markets, and culture/discourse/public opinion”. Those interactions are addressed by the Multi-level Perspective (MLP), a theory that uses three levels to graphically illustrate how transitions take place (Figure 3). These three levels are: *niches* (the locus for radical innovations), *socio-technical regimes* (the locus of established practices and associated rules that stabilize existing systems), and an exogenous socio-technical *landscape* (Geels, 2011: 26). Although the MLP has been applied to specific cases like transport, energy, agri-food and others (Hofman et al., 2004; Geels, 2011), in this thesis it was used to assess the potential transition from the current SWM regime to an inclusive SWM regime. However, before assessing the transition as such, the current SWM needed to be characterized. The characterization of the SWM of Cotacachi follows the structure given by the three levels of the MLP, being this characterization supported by theories of participation as shown in Figure 1.
2.3.1. THE SOCIO-TECHNICAL REGIME

The word *regime* comes from the analysis elaborated around the aim to explain transitions from a current socio-technical system, towards a more sustainable one. A *socio-technical system* is defined as the linkages between elements necessary to fulfill societal functions namely transport, communication, nutrition, and so forth (Geels, 2004). The socio-technical system object of this study is the solid waste management (SWM) of the Cotacachi canton. Geels (Ibid) lists a set of elements and resources\(^9\) that are part of the socio-technical systems; however, within this research, special attention will be given to the practices (product of knowledge, perceptions, technologies, and regulations) around the *formal* (municipal) SWM of Cotacachi.

Therefore, the *socio-technical regime* is defined as the “deep structure” (Geels, 2011: 27) of the socio-technical systems, a “[...] set of rules that orient and coordinate the activities of the social groups that reproduce the various elements of the socio-technical systems” (Ibid). With rules Geels (Ibid) refers to “cognitive routines and shared beliefs, capabilities and competences, lifestyles and user practices, favorable institutional arrangements and regulations, and legally binding contracts”. These rules strengthen the structure of the existing sociotechnical systems, impeding its modification in the endeavor of achieving a (sustainable) transition, thus called also *lock-in mechanisms* (Geels, 2011). There have been critics to the MLP calling for a clearer operationalization of the regime as concept especially when differentiating with the concept of system (Genus and Coles, 2008, in Geels, 2011: 31; Markard and Truffer, 2008, in Geels, 2011: 31). In response to that, Geels (2011: 31) states:

“System then refers to tangible and measurable elements (such as artefacts, market shares, infrastructure, regulations, consumption patterns, public opinion), whereas regimes refer to intangible and underlying deep structures (such as engineering beliefs, heuristic, rules of thumb, routines, standardized ways of doing things, policy paradigms, visions, promises, social expectations and norms). So ‘regime’ is an interpretive analytical concept that invites the analyst to investigate what lies underneath the activities of actors who reproduce system elements”.

Thereby, for the purpose of this study and related to SWM, critical points are: the shared beliefs, the (municipal) competences, user practices, and regulations; these points conform the SWM regime of Cotacachi.

2.3.2. THE NICHES

Geels (2011: 27) define the *niches* as “protected spaces” (e.g. laboratories or small market niches) used to explain the insertion of new technologies into socio-technical regimes and further transition. These protected spaces “allow nurturing and experimentation with the co-evolution of technology, user practices, and regulatory structures” (Schot and Geels, 2008: 538), thus protecting these innovation developments from market competition against established

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\(^9\) Geels (2004: 900) uses a figure to depict the elements and resources that conform the sociotechnical systems. These are grouped in three domains: the production of artifacts (labor, scientific knowledge, transference of knowledge, technological design, capital, tools, and natural resources), the use of artifacts (facilities, cultural meaning, and complementary artefacts), and the modes of distribution through regulations like norms, rights enforcement, and laws.
technologies. This approach is known as Strategic Niche Management (SNM), which has been used as an ex-post analytical framework; in other words, to evaluate the outcomes after a new technology has been introduced to the market (Schot and Geels, 2008). Researching under what circumstances the emergence of a technological niche is successful\footnote{“Success is defined in terms of transformation of a technological niche into a market niche and eventually a regime shift” (Schot and Geels, 2008: 540).}, Schot and Geels (2008: 540-541) address three important processes to take into account:

(a) Articulation of expectations and visions, which provide guidance for the learning processes, attract attention from possible interested stakeholders that would contribute to the achievement of the expected results.

(b) Building of social networks. This includes gather those interested stakeholders as a backdrop that would facilitate their interaction; the more diverse, the better they can contribute to the achievement of the expectations.

(c) Learning processes at multiple dimensions. Promoting the development of a technology entails an ongoing learning process. However, it is not suggested to just accumulate information but to complement cognitive frames and assumptions from other dimensions (e.g. technical aspects and design specifications, market and user preferences, cultural and symbolic meaning, regulations and government policy, etc.)

Even though the approach of the SNM addresses the study of a technology in fields like transport, energy, agriculture, sanitation, for the purpose of this study the niche level will be focused on the practices that certain citizens do with the solid waste. Despite the fact those practices do not include technology per se (e.g. new collection trucks, waste incinerators, anaerobic biodigestors), their out-of-the-regime status recall the application of the three processes just mentioned. These practices are considered to be out of the regime because their ways of dealing with the solid waste are not conceived by the common shred beliefs, municipal competences, common user practices and regulations. From now on, the citizens (individuals and groups) whom perform these practices are called the bottom-up practitioners (BUP). Their function within the MLP is to (un-)consciously break through the lock-in mechanisms of the socio-technical regime and exert pressure towards a sustainable transition (Geels, 2011).

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2.3.3. THE SOCIO-TECHNICAL LANDSCAPE

The socio-technical landscape is considered the broader context that influences the niches and regimes, “[…] it highlights not only the technical and material backdrop that sustains society, but also includes demographical trends, political ideologies, societal values, and macro-economic patterns” (Geels, 2011: 28). It is also defined as “[…) something that we are part of, that sustains us” (Rip and Kemp, 1998: 334), where the actors at the niche and regime levels can hardly influence the socio-technical landscape in the short term. For the purpose of this study, national policies on SWM, international SWM trends (e.g. inclusion of the informal sector to the municipal SWM systems), livelihood opportunities and the local political context embody the socio-technical landscape that influences and pressures the current SWM regime of Cotacachi.
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**FIGURE 3. MULTI-LEVEL PERSPECTIVE ON TRANSITIONS** (GEELS, 2011: 28)

Figure 1 explains the interaction of the three levels deploying graphically how a transition takes place. The niche level innovations develop internal momentum, which seizes the window of opportunity created by the landscape pressures on the regimen level; as a result, the innovations modify the regime, embodying in this way a transition (Geels, 2011).
2.4. RESEARCH QUESTIONS

Having reviewed the theories that provide guidelines under which the SWM of Cotacachi and its participatory process are assessed, the overarching research questions for this study is:

What is the role of the current citizen participation in the transition towards an inclusive solid waste management in the Cotacachi canton?

As it can be noticed, the main research question carries elements (e.g. current citizen participation, transition, inclusive solid waste management) that need to be described in order to understand the relation among them. Hence, sub-research questions (SRQ) that address the elements and their interrelation were set.

Regarding the characterization of the participatory process:

SRQ1: How does the citizen participation of Cotacachi work if assessed under the EPG principles, institutional design features and enabling conditions?

SRQ2: What are the levels of participation that the citizen of Cotacachi perform within the participatory process and solid waste management?

Regarding the characterization of the SWM under the MPL:

SRQ3: How does the Municipality manage the solid waste?

SRQ4: How do the bottom-up practitioners (BUP) manage the solid waste?

Regarding the assessment of a transition towards an inclusive SWM:

SRQ5: What are the opinions of the stakeholders involved in the solid waste management of Cotacachi towards the municipal and bottom-up solid waste practices?

SRQ6: What are the facts that depict a potential transition towards an inclusive solid waste management regime?

SRQ7: What are the challenges and opportunities of including the solid waste bottom-up practitioners into the participatory process of Cotacachi?
3. METHODS

A case study research design was used as for this investigation. Literature review, observations, open-ended interviews were the data collection methods. A snowball sampling method was used to find the interviewees related to the participatory process and the solid waste management. The field data collection was done from the last week of September until the end of December of 2014. Here the details of these methodology features are described and explained how and why they were used.

3.1. A CASE STUDY FOR COTACACHI

The case study for this thesis comprises the analysis of the relation between the participatory process and the SWM of Cotacachi. Creswell (2013) sets basic features that need to be taken into account when choosing for a case study as a research methodology; five of them are here described. First, the case under study has to be bounded by space and time; for the Cotacachi case, the boundaries are set by the cantonal territory where all the SWM stakeholders live and interact. Regarding the time lapse, the data collection phase included three months where current and real-life events were documented, as well as historical and background information regarding SWM practices and the participatory process trajectory. Second, the existence of the sustained participatory process of Cotacachi and how it has managed to shape a participatory consciousness in the inhabitants (Ortiz, 2004) made me wonder whether the SWM issue has been discussed. Creswell (2013: 100) calls this an unusual interest over a unique situation on the case which needs to be described, labeling it as intrinsic case. The third feature refers to the fact of achieving an in-depth understanding of the case, hence the following forms of qualitative data collection were used: open-ended interviews, observations and literature review. Creswell (2013) mentions how to approach to the data analysis as the fourth feature; for the Cotacachi case, it can be said that two units will be analyzed: the SWM and the participatory process. Nevertheless, it does not mean that they should be understood as two parallel phenomenon but as a unique case connected by the concept of a transition towards an inclusive SWM. Yin (2003: 43) names embedded case study to the fact of having more than one unit of analysis. A fifth feature addresses the descriptive part of the case needed to generate an accurate analysis. Such description entails the definition of themes, which for the purpose of this study they embody the theoretical framework presented in this chapter; that is the seven Empowered Participatory Governance (EPG) features and the three levels of the Multi-level perspective (MLP).

As a personal reflection, the reason why I chose this particular case study in Cotacachi was because it fits my personal interests for future academic and professional goals in the sense of understand local particularities that can provide insights of alternatives for participatory governance improvement. On support of the last statement, Flyvbjerg (2006: 222) asserts on his article about case studies that this methodology is essential in the process of human learning in the sense that context-based knowledge obtained from certain cases “[…] move from being a beginner to being an expert”.

It is important to mention that since this will be a case study, the results and findings can hardly be generalized and therefore entirely applied to other participatory processes in other municipalities of Ecuador due to the cultural, environment, political and economic context.
differences among them. In this matter, particularities of social dynamics and bottom-up practices around the focal points of this research, the solid waste management, cannot be extrapolated to other cities. However, the learning outcomes, knowledge, and experiences obtained through this research will help to understand which facts that either hamper or enhance the local participatory governance and will contribute to scientific development (Flyvbjerg, 2006).

### 3.2. LITERATURE REVIEW

The literature review as a secondary information collection method played an important role throughout the entire research. It was used to deep into the participatory planning theories mainly addressed by Fung and Wright (2003), Healey (2006), Arnstein (1969), Pretty (1995) and White (1996). Additionally, information related to worldwide experiences on an inclusive SWM approach was reviewed in order to enrich the characterization of the SWM of Cotacachi. This helped to narrow down the topic and objectives of the study when combined with information obtained from scientific publications related to the participatory process of Cotacachi and other places, and solid waste management experiences from other cities of the world. Parallel to the theories and concepts review, information related to the local context of Cotacachi were reviewed namely national citizen participation legislation, local ordinances, development and planning documents, AUCC\(^{11}\) resolution memoranda, in order to get enough insight about the local context and background. Methodology-related literature was also important in the early stages of the research, especially when elaborating around the positionality issue (section 3.6).

### 3.3. INTERVIEWS AND INTERVIEWEES

There were applied *open-ended* interviews by which I could “[...] ask key respondents about the facts of a matter as well as their opinions about events” (Yin, 2003: 90). With facts it is referred to the Empowered Participatory Governance (EPG) features and specific issues related to the solid waste management (SWM) regime of Cotacachi. Additionally, as Yin (Ibid) mentions, the insights provided by the respondent can be used for further inquiry, thus having a flexible questions list in terms of adding, using and skipping questions depending on the interviewee. The basic list of questions can be seen in the Annex 3. Even though I had prepared specific questions beforehand, long talks with some interviewees were necessary to test the relevance of the points raised by myself and also to include some others that I did not consider in the first instance. The interviews were mainly face-to-face and one preliminary talk via Skype. The information from the interviews was recorded by making hand-written notes and audiotyping for a posterior transcription (Creswell, 2014).

I was aware that I needed to interview several people in order to get insights that could help me to characterize the participatory process and SWM of Cotacachi. However, less than five people was in my contact list in the beginning of the field phase. Therefore, the first interviewees were

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\(^{11}\)AUCC stands for “Asamblea de Unidad Cantonal de Cotacachi”, in English: Cotacachi Cantonal Unity Assembly. A deep explanation on the AUCC is provided in section 4.2.1 as an introduction to the characterization of the participatory process.
the sources of new contacts; they recommended me to talk with other important actors involved in the SWM and participatory process of Cotacachi. Such sampling approach is called snowball sampling. These first contact persons, like the President of the AUCC, played the role of the gatekeeper because he introduced me to another people from the AUCC and the Municipality. Additionally, an important moment to identify interviewees was the annual assembly of the AUCC to which communitarian leaders, Municipality officials, presidents of organizations and independent citizens attended.

For the purpose of this study, the interviewees were divided into three categories (Annex 1): first the people from the AUCC and the people from the Municipality (the last ones referred also as municipal officials). The second category is conformed by the bottom-up practitioners (BUP), the people who perform different ways of dealing with the solid waste. And a third category conformed by people from NGOs, communitarian leaders, parish presidents and a researcher. The people from the AUCC and Municipality were asked mainly the same questions related to the participatory process and SWM regime; the BUP had a different set of questions aimed to get information related the activities they do; for the people from the third category, a mix of both sets of questions were used depending on their expertise and role within the participatory process and SWM regime. Thirteen people from the first category were interviewed, twenty four from the second category, and nine from the third category.

An interview protocol was used on each of the interviews accomplished in the field. It contained basic components now detailed:

- A short introduction of myself as a Master student form the Wageningen University followed by a description of the research work that I am doing and finally explaining why I am interviewing the person.
- Permission for audiotaping the interview was always requested.
- An ice-breaker first question related to the interviewee personal information (e.g. name, position, experience, BUP’s activity description, etc.) depending on the category of the interviewee.
- Follow the order of questions according to the category of the interviewee.
- Recording in the hand-written notes the time (minutes and seconds) of the audiotape when relevant information was provided.
- A final request for further comments that my questions did not cover or whether the interviewee had questions for me.
- A thank-you statement and request of possible interviewees that he or she could direct me.

3.4. OBSERVATIONS

During the field phase of the research, I took part as a complete observer, which means that I collected data by observing without participating (Creswell, 2014: 191). Thereby, I was present in

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12 “Snowball sampling is the process of selecting a sample using networks. To start with, a few individuals are selected and the required information is collected from them. They are requested then to identify other people in the group or organization, and the people selected by them become part of the sample” (Kumar, 2011: 208).

13 A gatekeeper is defined as one of the first contact persons on the field who due to his/her position can facilitate the access and contact with other people (Sanghera & Thapar-Björkert, 2008). The President of the Assembly was one of the main gatekeepers throughout the field phase of the research.
several activities related to the participatory process and solid waste management of Cotacachi. Regarding the first one, I had the chance to attend to the annual assembly of the AUCC and witness the process of deliberation and resolutions generation. Additionally, I attended to one session of the Municipal Council\textsuperscript{14} and also to one session of the Popular Participatory Council (CPP)\textsuperscript{15}, as well as workshops related to territory planning and water management. Details of the AUCC and CPP are provided in the section 4.2.1 of the results chapter. Attending to these events helped me to triangulate and later interpret how the citizen participation works in Cotacachi, comparing what theory says about it and contrasting with the information from the interviews.

The same approach was used when doing the observations of the solid waste management. For approximately three weeks I joined the daily solid waste collection activities in the Urban Zone (in the collecting garbage truck and on my own bike); I visited the landfill and the farm were the organic waste is deposited; I visited the rural parishes looking for different ways of people dealing with the solid waste, as well as having a look on the dumping places of the rural parishes. Additionally, I spent a couple of hours with each the informal collectors when possible, and watched how they do their activities while I was doing the interviews. Therefore I could contest the asseverations and perceptions of other interviewees (mainly Municipality and AUCC ones) upon the solid waste management performed by the bottom-up practitioners (BUP) of the Cotacachi canton.

### 3.5. DATA ANALYSIS

The analysis of the data follows the steps suggested by Creswell (2014: 197-201). These steps are now described:

**Step 1: organize and prepare.** As the interviews were conducted, the recordings were transcribed and the hand-written notes from the observations were also typed.

**Step 2: read through all the data.** Reading through the transcriptions and typed notes gave me a general overview of the information of the data collected hitherto. This does not mean that I read all the data once I finished the interviews, but it was a constant exercise that helped me to reflect whether the collected information is following the structure provided by the theoretical framework and research questions. Therefore, the transcriptions contained linking comments that would relate them with the pictures, observation notes and literature review insights that would guide afterwards the triangulation. And additional activity done especially during the field, yet not mentioned by Creswell, was to constantly listen to the recordings in order to get familiar with the content and the important themes and issues raised on each interview.

**Step 3: coding the data.** Coding means “[...] aggregating text or visual data into small categories of information, seeking evidence for the code from different databases being used in a study, and then assigning a label to the code” (Creswell, 2013: 184). The coding of the data was done by hand, highlighting in the transcriptions the information related to the concepts addressed in the theoretical framework (EPG and MLP) in the context of the participatory process and SWM regime. Besides using the EPG and MLP concepts for coding, (repetitive) issues raised by the

\textsuperscript{14} The Municipal Council is the legislative and inspection organism of the Decentralized Autonomous Governments (GAD); it is conformed by the mayor and the elected councilors (República del Ecuador, 2010a).

\textsuperscript{15} The “Concejo de Participación Popular” (CPP) or Popular Participation Council is the board of representatives of the AUCC. Details are explained in the section 4.2.1.
interviewees were also highlighted throughout the transcriptions; this specific cases are called *in vivo* codes (Creswell, 2013: 185; Creswell, 2014: 198).

**Step 4: coding categories or labels description.** And Excel spreadsheet was used to allocate each of the coding categories or labels in a column, followed by each interviewee’s comment or information provided regarding each label in the adjacent columns. As Creswell (2014: 199) states, the coding categories can be grouped into themes, which usually become the headings of the findings chapter, as it is the case for this report. Therefore, the themes are the seven features of the EPG theory and the three levels of the MLP.

**Step 5: representation of the themes.** This step embodies the results section, where testimonies from the interviews, observation insights and literature review are addressed in order to build a storyline or narrative that will give a sense to each theme in the context of the case study. Descriptive tables about the stakeholders and their activities are used to complement the narrative on each of the themes.

**Step 6: interpretation.** This is the final step that gathers a narrative product that answers “what are the lessons learned” (Creswell, 2014: 200) after having conducted the research. The data collected through interviews, observations, and literature review was triangulated. That means for example the comparison between findings of the Cotacachi SWM with findings from studies on SWM in other cities around the world. In this way, different sources of information are compared with each other in order to reflect them with the theories that lead to draw conclusions and recommendations as a final step.

Regarding the last step, Yin (2003: 111-112) stresses the need of using an “analytical strategy”, which for the purpose of this study, *relying on theoretical propositions* is the one that fits the most. This respond to the fact that the objectives, design, and research questions of the case study were based in theoretical propositions: EPG and MLP, as well as participation typologies, and principles from the Collaborative Planning theory.

### 3.6. POSITIONALITY

In order to give importance on the self-reflectivity habits in order to avoid bias in qualitative research, the term *reciprocity* well introduces the issue of positionality: “reciprocity is intertwined with the value of reflexivity, the belief that researchers should continually reflect about issues and positionality in their work” (Huisman, 2008: 374). Hence specific issues related to ethnicity, education, power relations, gender, age, personal interests, among others, build up *my position* as a researcher. “Positionality refers to the way in which others position the individual identity and affiliations he/she may have” (Sanghera and Thapar-Björkert, 2008: 553), being the *others* the people from Cotacachi that I will approach throughout my study. Such “(...) researchers’ social, cultural and subject positions (amongst others) affect the questions they ask, how they frame such questions, the theories to which they are drawn, how they access and interpret data, and their relation with informants in the field through interviews (...)” (Hoogendoorn and Visser, 2012: 256).

Even though there is no cooking recipe for setting a standardized tool kit for avoid bias throughout the field inquiry due to the researcher’s positionality, paying attention to this issues “(...) make the researcher more vigilant about power relations and their impact on exchange and production of information and knowledge” (Chacko, 2004, quoted from Sanghera and Thapar-
Björkert, 2008: 558). Therefore, before going to the field, I elaborated around a few points that could describe my position in the context of Cotacachi. These points were: the ethnicity issue, my personal interests, the power relations and a relative working for the Municipality.

Considering the ethnic diversity of Cotacachi (see next section about the Study Area), I feared to be labeled as an outsider, which may have negative consequences when gathering the field data and especially when doing interviews, since it can create an environment of lack of trust or misidentification with parties who are contrary to the local community principles and values (Sanghera and Thapar-Björkert, 2008). I have to say that when I conducted my interviews, and environment of mistrust was not prevalent in any case, not even when talking to indigenous people, maybe because as I introduced my self, I mentioned that I am Ecuadorian and originally from Imbabura, the province where Cotacachi is located. Nevertheless, I did not think in advance that the language could be a barrier since some of the BUP interviewees were indigenous (women) whose mother language is Kichwa. This made me eliminate questions previously meant for the BUP which intended to address concepts from the Empowered Participatory Governance (EPG). Instead, I opted to use questions that would help me to understand the activities the BUP do and why.

The point related to my personal interest has to do with the fact that I have the faith that participatory processes are very good (if not the most) approach for a fair and accountable decision-making. Moreover, related to the SWM issue, I am supporter of the inclusion of the formal sector to the municipal SWM regime, which could be reflected throughout the study. This could unconsciously create a bias stressed by Hoogendoorn and Visser (2012), who mention that the way researchers ask questions, access to information and analyze data could be influenced by the personal interests. However, I thought that a good way to cope with such possible source of bias was to constantly share my thoughts and findings with other people in order to receive critics and feedback, which have helped me to adopt an impartial position.

Having the president of the AUCC as a gatekeeper for finding other interviewees could have made me run into a position of somehow share the authority or power held by this person (Sanghera and Thapar-Björkert, 2008; Hoogendoorn and Visser, 2012). However, once in the field, I realized that among the interviewees there is a non-hierarchical relation, resulting in smooth and enjoyable talks.

Finally, the fact of having a relative working at the municipal radio station raised on me the following concern. Following the snowball sampling, some of the interviewees already knew that I was in Cotacachi for the field phase of the thesis since my relative warned them about my presence in advance. This could already bias the attitude from the interviewees towards me as researcher in the sense of giving special treat or answering what I wanted to listen. Even though it is very difficult to assess the presence or absence of such bias, I felt that it was not a threat and possible source of bias. Maybe a way to support that perception is mentioning that seven out of 46 interviewees recognized me as the nephew of the person that works in the municipal radio station.

### 3.7. STUDY AREA

The Cotacachi canton is located in the Imbabura Province, in the highlands of Ecuador (Figures 4 and 5). According to the 2010 census data, there are 40,036 inhabitants in the Cotacachi canton (INEC, 2010a). 40.6% of the people from Cotacachi auto-determinate themselves as indigenous,
53.5% as *mestizo* and the rest as Afro-Ecuadorians, white, and others (INEC, 2010b), showing a high diversity in terms cultural and ethnical background. Compared to the rest of the country, the indigenous population of Cotacachi is considerably high in relation to the other categories. Thus, according to the 2010 census data, 7.0% of the Ecuadorians auto-determinate themselves as indigenous, being the *mestizo* category the largest (71.9%) (INEC, 2010b).

The canton is organized territory-wise in parishes and communities, and spatially in zones; it has ten parishes: eight rural parishes (Imantag, Quiroga, Apuela, 6 de Julio de Cuellaje, Peñaherrera, Vacas Galindo, García Moreno and Plaza Gutiérrez) and two urban parishes (El Sagrario and San Francisco) located in the city of Cotacachi; the zones are: Andean, Urban and Íntag (Municipio de Santa Ana de Cotacachi, 2011). The division of the canton in zones responds to a more geographical, ethnical, ecological and economic division; therefore, the Andean Zone holds mainly the indigenous communities located in the slopes of the Cotacachi volcano (2500-5000 meters above sea level (m.a.s.l.)); the Urban Zone is located at 2500 m.a.s.l. and hold mainly the *mestizo* population; and the Intag Zone or Subtropical Zone which holds a rural and dispersed population between the 400 and the 2500 m.a.s.l. hosting mainly *mestizos*, a small proportion of Afro-Ecuadorians (1%) and a few white settlers (Ortiz, 2004; Municipio de Santa Ana de Cotacachi, 2011).

As background information, the national territory of Ecuador is divided into Regions, Provinces, Cantons and Rural Parishes, each of them is known as a “Gobierno Autónomo Descentralizado” or “GAD” (Autonomous Decentralized Government), where the autonomy word refers to political, administrative and financial issues (República del Ecuador, 2010a). Decentralization is defined as the “[...] obligatory, progressive and definitive transference of competences, including the professional capacities, financial, material and technological resources, from the central government to the autonomous decentralized governments” (República del Ecuador, 2010a: 59). The communities, mentioned in the previous paragraph, are legally recognized commonly owned land but are not considered GADs, which means that they cannot practice autonomy in terms of budget, making them dependent on the GAD where they are located (República del Ecuador, 2010a).

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Figure 4. Geographical Location of Ecuador and the Imbabura Province

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The word *mestizo* refers to the ‘mixed race’ between white people and indigenous (WordReference, 2014).
Cotacachi canton in the Imbabura province, in yellow (SENPLADES, 2014)

Parishes of the Cotacachi Canton (SENPLADES, 2014)

FIGURE 5. GEOGRAPHICAL LOCATION OF THE COTACACHI CANTON AND ITS RURAL PARISHES
4. RESULTS: UNFOLDING THE PARTICIPATORY PROCESS AND THE SOLID WASTE MANAGEMENT (SWM) OF COTACACHI

“I help the Municipality because they do not manage to deal with all the waste; before I start collecting, the people used to put their waste out of their houses and the dogs used to spread it out. Instead, I help to keep the city cleaner, therefore, the Municipality should support me.”

Interview with Luis Alberto Farinango, November 2014

“I think that the participatory solid waste management must be a reality, because there is no environmental issue in public management which does not include the citizen participation in coordination with the local governments.”

Interview with Felipe Toledo, October 2014.

This chapter gathers a set of testimonies and observations’ outcomes that linked together intend to describe in detail the case under study in order to achieve the aim of the research: analyze the role of the citizen participation in the transition towards an inclusive SWM in the Cotacachi canton. Unfolding the stated aim of research, the themes (depicted by the concepts of the EPG and the MLP theories) contemplate to address the information needed to characterize the SWM regime and the participatory process of Cotacachi, as well as how the stakeholders see and perceive them. However, before going to the findings, it is needed to purvey enough background information (important fact stressed by Bull et al., 2010) related to the context upon which the participatory process and SWM regime of Cotacachi stand. Therefore, data related to the current legislation on citizen participation, national and local political context and a brief history of the participatory process is provided beforehand.

4.1. THE CONTEXT OF THE COTACACHI PARTICIPATORY PROCESS

For the purpose of this chapter, it is worthwhile telling about the context upon which Cotacachi’s participatory process stands. A brief look at the current Ecuadorian legislation on citizen participation will show elements that the civil society can make use in the struggle of colonizing state power (third institutional design feature from the EPG theory, section 2.1). It is followed by
a condensed national and local political context that will be useful to understand some points raised by the actors of Cotacachi (both municipal and civil) around the participatory process and the reasons why to attain higher levels of power.

4.1.1. ECUADORIAN LEGISLATION ON CITIZEN PARTICIPATION

Citizen participation in Ecuador is named, promoted, and ruled in several legislation documents. Both, the Constitution of Ecuador (República del Ecuador, 2008) and the main planning document called “Plan Nacional del Buen Vivir” (Good Living National Plan) (SENPLADES, 2013) refer to citizen empowerment as the path towards a significant democracy through different participation mechanisms (Ospina, 2013).

Starting from the Constitution of Ecuador (República del Ecuador, 2008), in the articles 95, 96 and 100 it is clearly expressed that the citizens, either individually or collectively, will play a key role in the decision-making process and planning of public matters, detailing the fact that each level of government (regional, provincial, cantonal and parish) will have its own participation instance. The Land Use, Autonomy and Decentralization Organic Code (COOTAD) (República del Ecuador, 2010a: 31) states as a function of each municipal government that it should “implement a citizen participation system for rights enforcement and democratic management of the municipal action”. Further article 304 mentions that each GAD will create a citizen participation system, regulated by local norms and will have its own structure and denomination. There is no doubt that citizen participation became a legally binding planning tool for the different levels of government in Ecuador. However, interpreting citizen participation out of the Constitution of Ecuador and the COOTAD can generate different outcomes throughout the national territory. Therefore, the Citizen Participation Organic Law (República del Ecuador, 2010b) names participation spaces, instances and mechanisms in the attempt to make it a reality at a local level; the ones used and related to the Cotacachi participatory process are here described:

Local Assemblies:

Named in article 56, the Assemblies are meant to gather the civil society for deliberation and increasing their collective capacities of interlocution with the authorities in order to influence the public policy making process and the public management issues. Article 60 states the functions of the Assemblies: respect and demand the enforcement of the citizens’ rights; propose local development agendas, plans, programs and local public policies; promote the civil organization and capacity building in participation matters; independently organize and request the accountability from the authorities; promote debate, deliberation and consultation regarding public interest issues; and implement social control measures. Articles 62 and 63 state that the different government levels should transfer financial resources to the assemblies on behalf of their existence. These two articles mention that the assemblies should be financed by the respective local government. However, it does not give an amount or percentage of budget.

Planning Local Councils:

Article 66 defines the planning local councils as spaces conceived for the formulation of development plans and local policies based on the priorities, territorial strategic objectives and action plans defined by the participation instances. At least 30% of the representatives of the planning local council should belong to the civil society. The local instances of citizen participation will designate such representatives.
Participatory Budget

From article 67 to 71, the participatory budget is defined as an obligation for each level of government; it should be an open invitation for the individual or collective participation of the civil society. It is stated that the participatory budget delivers decision-making power to the citizen and civil organizations in order to define the orientation of the public investment ensuring the financial resources redistributive justice. The participatory budgets are to be implemented immediately within the respective level of government. The debate upon the participatory budget should follow the guidelines from the development plan elaborated by the local planning council. The participatory budget is led and coordinated by the local authorities form the respective level of government.

Empty Chair

Article 77 addresses the empty chair, which is a spot within the local government meeting that will be used by one or more representatives of the civil society, depending on the number of topics to be discussed. Within the local assemblies, popular councils or public hearings will be decided who will occupy the empty chair; the person who wants to make use of the empty chair should go through an accreditation process defined by the local government administration. The person who uses the empty chair has voice and vote upon the decisions, which also raises legal responsibilities upon him or her.

Public Accounts, Observatories and Advisory Councils

Articles 78-80 mention these participation mechanisms meant to make follow-up processes and keep track on the decision taken by the local authorities; they also work as advisory bodies conformed by citizens and organizations from the civil society.

4.1.2. NATIONAL AND LOCAL POLITICAL CONTEXT

After a period of dictatorships in the 70’s, Ecuador returned to a democratic system of government, facing the peak of political instability in the 90’s and in the beginning of the 2000’s when several presidents were overthrown before the end of their term resulting in a very low credibility of the citizens towards politicians (Ospina, 2013). By the end of that heated period of time full of protests coming from social organizations, the Constitution of Ecuador of 1998 seems to gather some of the social demands and included participation and decentralization concepts (Herrera et al., 2013). However, the demands “(welfare state, markets control, national sovereignty, civil rights enforcement, interculturality, Pluri national State, etc.)” (Herrera et al., 2013: 12) where not fully attended until the “Alianza País - 35” (AP-35) political movement wins the elections in 2007 with Rafael Correa as president, who institutionalized those social requests. Drafting and approving the new Constitution (2008) and by doing several state administrative reforms, president Correa reaches significantly high levels of acceptance (80-90%) (Ospina, 2013) which hitherto have been relatively maintained (80% according to SECOM (2014) and 60% according to CEDATOS (2014)).

Nevertheless, Herrera et al. (2013) and Ospina (2013) argue that this government has failed on tackling capitalism trends within Ecuador, the decision-making and the power has been re-centralized and that the accumulation economic model has been fostered by the exportation of raw material such as petroleum, mining, energy and agribusiness. This bring us to downscale the
political context to the level of the Cotacachi canton, which has a vast trajectory on social organization related to indigenous movements claiming the recognition and enforcement of their rights, the institutionalizations of a participatory process and communitarian organization against the mining activity in Íntag (Ortiz, 2004). A recently published documentary by Pocho Álvarez (2014) shows the anti-mining struggle that Íntag has faced since 1990 when a Japanese mining company started exploration works. In 2003, a Canadian company attempted to enter to Íntag for mining exploration purposes as well. Both companies were expelled by the local communities. There is a third endeavor of doing mining at an exploration phase in Íntag; in September of 2013 the State Mining Company (ENAMI) from Ecuador, in cooperation with the Chilean Mining Company (CODELCO) accessed to the area provoking social tensions within the community (Álvarez, 2014). This last happening is openly criticized by the political movement, which is currently in the municipal administration of Cotacachi.

After having won the municipal elections of Cotacachi, the political movement “Vivir Bien – Ally Kawsay” (Living Well) started the canton administration in May of 2014 having as a main motto the strengthening of the participatory democracy (Movimiento Vivir Bien, 2014). On behalf of the political movement Vivir Bien – Ally Kawsay, the current mayor of Cotacachi expressed the willingness to collaborate with the central government. The conditions of such collaboration comprise respecting civil and nature rights. However, the mayor expressed the disagreement with the central government and its re-centralization measures, even addressing how the president Correa (from AP-35) is using media to misinform the population.\(^\text{17}\)

Summing up this section, there are two important facts that need to be considered when addressing the political context of Cotacachi. The first one is that both political movements, the AP-34 from the central government and the Vivir Bien – Ally Kawsay from the municipal government consider opposed to each other mainly because of the mining issue. The second one is that the current municipal administration has a political inclination which aims to foster the participatory democracy within the Cotacachi territory. That vision responds to the fact that a significant number of the people who are now working for the Municipality (e.g. mayor, Citizen Participation Department, Planning Department, Department of Environment, Communication Department, etc.) used to collaborate with the AUCC as technicians.\(^\text{18}\)

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**4.2. THE PARTICIPATORY PROCESS OF COTACACHI**

The Empowered Participatory Governance (EPG) theory described in the theoretical framework chapter of this document provides a structure meant to be used to characterize the participatory process of Cotacachi. For some interviewees, there is no starting point for the participatory process of Cotacachi; they claim that participation exists since one thousand years ago as part of the indigenous culture. However, for the purpose of this study, the starting point of the participatory process is identified with the birth of the Cotacachi Cantonal Unity Assembly (AUCC) in 1996. In the next part of this section (4.2.1), the AUCC is described. Details about the history,

\(^\text{17}\) Mayor Jomar Cevallos’ opening speech in the XIX annual assembly of the AUCC held in the “La Calera” indigenous community, 18 of October 2014.

\(^\text{18}\) Term named by several interviewees. In the local jargon, the word technicians refers to those people who strictly do not belong to a civil organization, but mainly support and advice the decision takers among the civil society organizations; usually they have some kind academic preparation (e.g. social or environmental science).
achievements, and structure of the AUCC give background to introduce the characterization of the AUCC under the EPG features (4.2.2). Due to the specificity of some interviewees’ testimonies and claims, it is important to acknowledge some historical facts of the AUCC.

4.2.1. THE COTACACHI CANTONAL UNITY ASSEMBLY (AUCC)

It was in 1996 when an indigenous political movement achieved state power positions among several local governments of the Highlands and Amazon region of Ecuador as mayors and councilors. The Cotacachi canton was one of them, having elected Auki Tituaña as mayor that year (Ortiz, 2004) and being re-elected in 2000 and 2004. He convened the first “Asamblea de Unidad Cantonal de Cotacachi - AUCC” (Cotacachi Cantonal Unity Assembly) almost 15 years before the current Citizen Participation Law exists and mentions the local assemblies as a way of civil society participation. When I asked where the idea came from and what the reasons for such a decision were, he addressed two points related to his personal life followed by a reflection:

“[1] I belong to an ancient group of people, the Kichwa from Otavalo and Cotacachi, where the political, social and religious organization system has a participatory essence, and all that is still alive among the communities […] [2] When I did my academic studies in Cuba, I saw there were inclusion systems for the actors: youth, farmers, women, workers, intellectuals, etc. […] Therefore those two sources of information made me wonder how to fuse them and articulate them for local and national governments […] They achieved the power through the weapons [referring with disagreement to the Sandinista Revolution in Nicaragua and the Cuban Revolution] controlling and ruling the countries in their own way, but then I say, why do not we try to share that power? Share, co-govern, it would save us time, money, and even help us being more effective in boosting the development”

Clearly Auki Tituaña had on mind (and still does) that the representative democracy was not enough to govern, and that sharing or redistributing the power to the civil society was a more efficient way to deal with the local issues. Nevertheless, Tituaña is currently not involved at all in the AUCC due to political discrepancies. Santiago Ortiz (2004) asserts that the AUCC became the most important organism of consultation and civil society representation in Cotacachi, however, how it is seen by the actors nowadays is presented in the next section. But before that, the structure of the AUCC is here shown after a brief overview of the AUCC’s trajectory in the last 19 years.

Based on the testimony of some interviewees it can be said that the AUCC achieved its highest point of participation during the first two terms of the mayor Tituaña between 1996 and 2005 declining towards his third term between 2005 and 2010 and facing almost its “death” during the term of the mayor Alberto Andrango between 2010 and 2014. Such “highest point of participation” attached to people perception might be supported by the fact that the participatory process of Cotacachi received three international prizes (Municipio de Santa Ana de Cotacachi, 2008):


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19 Interview with Auki Tituaña, three terms mayor of Cotacachi and creator of the AUCC.
20 Interviews with Leonardo Alvear, ex-president of the AUCC in two terms, September 2014; Ana Cristina Flores, Director of the Citizen Participation Department of the Municipality, October 2014; Christian Paz, from Oxfam, October 2014.
Cities for Peace Prize given by UNESCO, in 2002.
First prize for showing the best practices on “inclusion of indigenous women in the participatory budget” given by the International Observatory on Participatory Democracy (OIDP), in 2006.

These prizes also respond to the fact that during Tituaña’s second term, in 2001 the participatory budget was created in order to strengthen the democracy, improve accountability and bridge the necessities from formerly abandoned sectors to financial resources (Municipio de Santa Ana de Cotacachi, 2008). According to a report from the project Red URBAL 9 coordinated by the Porto Alegre Municipality (Brazil), 69% of the investment budget of Cotacachi was planned using the participatory budget methodology in 2002, managing to implement 92% if it (Cabannes, 2005). Obviously empowering the people upon taking decisions over the investment budget helped to create these perceptions of high levels of participation, a fact that still the people from the AUCC and the Municipality talk about.

Nevertheless, conflicts between the AUCC and the municipal government during the last term of Tituaña caused the “divorce” between them. Parallel to that, the AP-35 political movement was promoting the participation national-wise, a discourse used by all the candidates at all the government levels; the AUCC opted to support Alberto Andrango from the AP-35 who was elected mayor of Cotacachi in 2010. Once in power, Andrango intended to create parallel assemblies in order to follow what the Organic Law of Citizen Participation says about local assemblies (addressed in this report in the section 4.1.1), braking total relation with the representatives of the AUCC and not giving any financial support for its annual realization. On reaction to that, the people from the AUCC decided to create the political movement “Vivir Bien – Ally Kawsay”, winning the elections in 2014 with Jomar Cevallos as mayor and a majority in the municipal council. It is promising for the participatory process and the AUCC that such political party won the election, but at the same time, a significant number of experienced people left the AUCC and now are working for the Municipality.

After this condensed history of the AUCC, it is helpful to understand its structure and how it is internally organized. When we think in a practical way of how the AUCC can represent the whole civil society of Cotacachi, is hard to imagine the entire population assisting to a meeting, discussing, deliberating and deciding for the future of the territory. Therefore, the AUCC has something called the “Consejo de Participación Popular - CPP” (Popular Participation Council), which is integrated by 20 civil society representatives detailed in the Table 4, plus its president. The CPP is defined as an autonomous civil society space where elected authorities (e.g. mayor and councilors) cannot be part of it; it gathers the representatives of the working groups and organizations (Table 4). It has a president (considered more as a spokesperson rather than an authoritarian figure) a vice president and secretariat; each of them represents each Zone (Andean, Urban and Íntag) and rotates every year the presidency. However, on a CPP meeting held on November 2014, there was a reform changing the presidency term to two years each person instead of one so the continuity of the projects and programs proposed by the president can be ensured. Therefore, the current presidency of the CPP and AUCC belongs to the representative of the Íntag Zone and he will be on office until the next AUCC annual meeting on

21 Interview with Ana Cristina Flores, Director of the Citizen Participation Department of the Municipality, October 2014.
22 Interview with Auki Tituaña, three times mayor of Cotacachi, December 2014.
23 Interview with Leonardo Alvear, ex-president of the AUCC in two terms, September 2014.
24 Interviews with Natalia Riera, from Xarxa, October 2014; Jomar Cevallos, mayor of Cotacachi, December 2014.
25 Memoranda of the XVIII AUCC meeting on December 2013 held in the Peñaherrera parish (Íntag).
26 Observations and memorandum of the CPP meeting held in Cotacachi on the 6th of November 2014.
2015; the next presidency term belongs to the representative of the Andean Zone (2015-2017) and the last one to the representative of the Urban Zone (2017-2019). The rotation of the presidency of the CPP and AUCC responds to a claim from the organizations that complained that the presidency always relied on the Urban Zone, lacking representation of the other two Zones of Cotacachi\(^{27}\).

The points here addressed highlight the importance of how the AUCC through its almost 20 years of existence has adjusted its structure through claims and deliberation from the different groups and organizations that conform it, in order of create reforms that pursue a better representativeness and equity of power among them. It is also important to consider the rotation issue especially because the leaders from the Andean Zone (next president of the CPP – AUCC) have a political inclination aligned with the one from the central government (AP-35), which is contrary to the current municipal political party (Vivir Bien – Ally Kawsay); some of the already-existing tensions will be raised in the coming section (4.2.2.3).

### TABLE 3. ORGANIZATIONS THAT CONFORM THE POPULAR PARTICIPATION COUNCIL - CPP\(^{28}\)

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotacachi Peasants and Indigenous Organizations Union (UNORCAC)</td>
<td>UNORCAC can be considered a synonym of the Andean Zone; it represents to water associations, river basin associations and all the indigenous communities that conform them</td>
</tr>
<tr>
<td>Central Committee of Women of UNORCAC</td>
<td>Working group in charge of issues related to women and gender within the rural-Andean context</td>
</tr>
<tr>
<td>UNORCAC Coordinator of Youth</td>
<td>Working group in charge of issues related to youth within the rural-Andean context</td>
</tr>
<tr>
<td>Cotacachi Neighborhoods Federation (FEBAC)</td>
<td>The FEBAC represents the 16 neighborhoods and their respective committees of Cotacachi</td>
</tr>
<tr>
<td>Urban Coordinator of Women</td>
<td>Working group in charge of issues related to women and gender within the urban context</td>
</tr>
<tr>
<td>Urban Coordinator of Youth</td>
<td>Working group in charge of issues related to youth within the urban context</td>
</tr>
<tr>
<td>Toisán Corporation</td>
<td>The Toisán Corporation gathers agro-productive, social, and environment organizations from the Íntag Zone</td>
</tr>
<tr>
<td>Íntag Coordinator of Women</td>
<td>Working group in charge of issues related to women and gender within the Íntag Zone context</td>
</tr>
<tr>
<td>Íntag Coordinator of Youth</td>
<td>Working group in charge of issues related to youth within the Íntag Zone context</td>
</tr>
<tr>
<td>Talleres del Gran Valle Corporation (CTGV)</td>
<td>It is an association of communitarian agro-producers locate in the Manduriacos valley (Lowlands of the Íntag Zone)</td>
</tr>
</tbody>
</table>

\(^{27}\) Interview with Victor Hugo Robalino, President of the AUCC.

\(^{28}\) Information obtained from the material provided during the XIX annual assembly of the AUCC in October 2014, from interviews, from Santiago Ortiz’s book (2004) and from the web page of the AUCC (Asamblea de Unidad Cantonal de Cotacachi, 2013).
4.2.2. THE COTACACHI CANTONAL UNITY ASSEMBLY (AUCC) UNDER THE EMPOWERED PARTICIPATORY GOVERNANCE (EPG) LENSES

Having said that the AUCC was created with the aim to share power and become a support in governing, and that it has a structure that attempts to be as representative as possible, it can be treated as what Fung and Writhe (2003) call: an EPG experiment. Therefore, the three principles, three institutional design features, and enabling conditions are addressed one by one in order to reflect the EPG theory (Fung & Wright, 2003) with the practice (AUCC). SWM findings are also presented and linked to the applicable EPG features in order to highlight the connection between the participatory process and the SWM.

4.2.2.1. FIRST PRINCIPLE: PRACTICAL ORIENTATION

Since the AUCC started in 1996, the civil society organizations have always attempted to claim needs that have been historically abandoned or not addressed by the conventional governments’ systems, being the rural sector a good example of such situation (Báez et al., 1999; Ortiz, 2004). Thereby, specific topics like health, environment, agro-productivity, infrastructure, and so on, have been part of the deliberation between the organizations and the authorities. In the last annual assembly of the AUCC, eleven tables of discussion were set in order to gather resolutions requested by the participants. The topics of the discussion tables were:

- **Cantonal level**
- **Inter-sectorial Council of Environment** Working group in charge of issues related to environment and nature conservation within the canton
- **Cantonal Corporation of Tourism** Working group in charge of issues related to tourism within the canton
- **Inter-sectorial Council of Education** Working group in charge of issues related to education within the canton
- **Inter-sectorial Council of Agricultural Production** Working group in charge of issues related to agricultural production within the canton
- **Inter-sectorial Council of Artisans** Working group in charge of issues related to artisan within the canton
- **Cantonal Coordinator of Women** Working group in charge of issues related to environment and nature conservation within the canton
- **Churu Popular Artistic Movement** Working group in charge of recuing, spreading and support the popular art within the canton
- **Luchando por un Porvenir Association** Working group in charge of enhancing the inclusion of disabled and people with special capacities within the canton
- **Cotacachi Cantonal Sports League** Working group in charge of issues related to sports within the canton
- **Artisans Association** Association of artisans of Cotacachi created in 1911

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29 Material provided during the XIX annual assembly of the AUCC, October 2014.
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- Territorial issues: limits of the Golondrinas rural parish; indigenous communities and peasants’ land boundaries setting of the Sagrario and San Francisco Parishes.
- Participation system: guidelines of the participation system ordinance draft.
- Education and youth: schools closed; access to university; drugs consumption.
- Basic services public company creation.
- Development and land use plan update.
- Sexual diversity: towards an inclusionary agenda.
- Disability and inclusion: ways of inclusion; socialization of the equity for disabled agenda.
- Childhood and adolescence: childhood inputs for the development plan.
- The elderly: inclusion and ways of participation; election of the representative.
- Art and culture.
- Food sovereignty: socialization of the Water Law; Land Law and with a gender and intercultural focus.

Each of the discussion tables was meant to produce a maximum of three resolutions that were validated in a plenary with all the attendants; there was possibility to modify the resolutions during the plenary where deliberation also took place\(^{30}\). After the resolutions are approved, is a duty of the members of the CPP and the president of the AUCC to make sure the resolutions are achieved, which is presented in the “accountability speech” of the president of the AUCC in the next annual assembly\(^{31}\). Since neither the president nor the representatives of the CPP have financial resources or power to create local laws unilaterally, they have to coordinate with the Municipality and be observers of the implementation, assuming some power for decision-making in some participation instances (details in section 4.2.2.4.). Thus comparing the discussion tables’ methodology of the AUCC with the practical orientation principle of the EPG, it is clear that participants discuss specific issues and practical problems.

Nevertheless, when I asked whether the solid waste issue has been discussed or is actually being discussed, the Director of the Citizen Participation Department of the Municipality and a person from the NGO Oxfam mentioned that AUCC has always had a discussion table and a working group in charge of environmental issues. However, within this discussion table, the mining issue has dominated the deliberation and resolutions putting to the side important topics like solid waste\(^{32}\).

Two interviewees\(^{33}\) mentioned that a “heated discussion” related to the SWM issue took place in the past when Auki Tituña was the mayor of Cotacachi. There was a project of implementing a biodigester that would process organic waste, but the inhabitants of the area where this project was supposed to be settled impeded the access to the trucks that were bringing the equipment. Additionally they mentioned that when the landfill was built, during the administration (2010-2014) of Alberto Andragno from AP-35 political party, all the discussions about SWM ended because they thought the problem was solved.

Therefore, SWM has not been discussed in formal spaces of participation like the AUCC, but through protests and political pressure on the local authorities whom so far have opted for top-down and technical measures to tackle the SWM problems as it is shown in the SWM characterization sections.

\(^{30}\) Observations during the XIX annual assembly of the AUCC, October 2014.
\(^{31}\) Interview with Victor Hugo Robalino, President of the AUCC, September 2014.
\(^{32}\) Interviews with Ana Cristina Flores, Director of the Citizen Participation Department of the Municipality and Christian Paz from Oxfam, October 2014.
\(^{33}\) Interview with Leonardo Alvear, ex-president of the AUCC in two terms, September 2014, and Christian Paz from Oxfam, October 2014.
4.2.2.2. SECOND PRINCIPLE: BOTTOM-UP PARTICIPATION

Even though everyone can attend an annual assembly of the AUCC, including people from the Municipality, the CPP is strictly integrated by representatives of civil society organizations. This means that the AUCC is taking steps towards autonomy (a point presented in 4.2.2.5. section) being clearly pointed out by the mayor on the opening speech the first day of the XIX annual assembly:

“Look at the CPP table, in none of those positions the mayor has voice and vote; in none of those positions the commissary or an elected authority has a vote. This is what we have been claiming and now is a reality [...]”

In this way he shows the political willingness and his self-identification with the participatory trajectory of the AUCC. Regarding ordinary people taking part of the participatory process, according to the memoranda of the XIX annual assembly of the AUCC, approximately 800 people attended the first day (discussion tables) and 600 the second day (plenary). The assistants came mainly from the rural areas of Intag and the Andean Zone, being the Urban Zone the least represented. This means that the AUCC is actually accomplishing the challenge of bringing the (rural) organized civil society’s needs into the discussion tables. However, at the urban level and specially related to the SWM issue, the solid waste bottom-up practitioners (BUP) are yet not part of these discussions. Therefore when I asked these people whether they have heard or attended such assemblies, I got answers like: “I do not know what is AUCC, UNORCAC or FEBAC”; “I did not know that there is an AUCC annual meeting next week”; “[...] yes I have heard of the AUCC, but since we are illiterate, they do not take us into consideration”; “I know about the AUCC, but that is only for educated people [...]”. These arguments evidence that there are still more opportunities to engage some groups of (urban) civil society that are still not represented by the AUCC or CPP.

4.2.2.3. THIRD PRINCIPLE: DELIBERATIVE SOLUTION GENERATION

The methodology used on each discussion table during the AUCC follows these steps: once all the participants are present on each discussion table, there is a presentation given by an expert about a topic related to what will be discussed on that table; after the presentation there is a round of questions, followed by a summary given by a facilitator who will lead the discussion in order to generate the resolutions. Another moment of deliberation takes place at the plenary, where the resolutions are reviewed one by one receiving feedback and making changes if the participants request so. Therefore, in terms of decision-making, or in this case for resolutions generation, deliberation is a fact.

Performing deliberation exemplifies the three criterion suggested by Healey (2006: 69-71). Regarding the first one, about the creation of social capital and common awareness, Ortiz (2004) points out when analyzing the benefits of implementing the participatory budget in Cotacachi as a deliberation exercise. After ten years of that publication, Leonardo Alvear reaffirms this fact by referring to the participatory process as “[...] a constant and systematic work based on common

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34 Mayor Jomar Cevallos’ opening speech in the XIX annual assembly of the AUCC held in the “La Calera” indigenous community, 18 of October 2014.

35 Interviews with solid waste bottom-up practitioners (BUP).

36 Observations during the XIX AUCC annual assembly, October 2014.
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sense and good will that has produced good results where people have learnt from [...] for me, it has been the school of my dreams [...]”37. Additionally, Hugo Robalino, mentions that “[...] it has been almost 20 years of participation [...] and it is easy to notice the political maturity of the stakeholders”38. The second criterion referred to the creation of policies that better reflect the local context can be exemplified by a draft of the ordinance named “AUCC System of Participation Ordinance of the Santa Ana de Cotacachi Canton”. This draft of ordinance aims to provide legal ground to the citizen participation on Cotacachi, defining participation spaces and mechanisms, actors’ roles and competences, and organizational and institutional facts39. The third criterion, related to including all actors who have a stake on the discussed issue, can be evidenced by the organizations and working groups that conform the CPP.

Within this principle of the EPG theory, Fung and Wright (2003) raise the issue of manipulation as a threat for an earnest deliberation. When asked to people from the AUCC whether there have been such cases, the answer was a “no”, which is complemented by an opinion of a person who holds a more impartial position:

“I do not think there was manipulation as such, maybe an exhaustive explanation upon certain topics [...] and what will be deliberated on each discussion table, which at some point I agree with, since that is included in the facilitation activity [...] In the other hand, some topics were fully explained by Jomar [mayor of Cotacachi], and then you doubt; however, he explained really good, especially the issues related to the undoable requests because they are not municipal competences”40.

Notwithstanding the previous comments, during the XIX annual meeting of the AUCC in October 2014, the presence and role of the municipal government in the organization and facilitation of the discussion tables and plenary made me doubt about the fact of the AUCC as a fully civil society space. That feeling had an echo when I attended the CPP meeting on the 6th of November 2014 and the representative of the UNORCAC (organization aligned with AP-35) openly criticized the fact that the AUCC is getting too politicized; in a personal interview with this person, she told me:

“ [...] that was really disturbing for me, because it has always been clear that the AUCC is not an institution attached to a political party, but now is totally politicized [...] all the material provided on the annual assembly was full of Vivir Bien content, and even the banner was pink [...] I do not have anything against them but the AUCC annual assembly looked more like a Vivir Bien meeting”41.

The councilor Manuel Narváez (from AP-35) coincides with such statement asserting “[...] the existence of the AUCC is fully justified as long as it steps aside from the political parties”42. These two opinions might not be labeled as manipulation, but they clearly express the perception of these two actors who think that the inclination of the AUCC is being biased or too influenced by the Vivir Bien – Ally Kawasy political party. For the José Cueva43, a former militant of the AUCC and currently municipal stuff member, “[...] this trend is unavoidable since it is a policy of the current administration to strength the participatory process, whose presence is therefore, still strong”. Finally, the answer of the mayor to this issue was:

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37 Interview with Leonardo Alvear, ex-president of the AUCC in two terms, September 2014.
38 Interview with Victor Hugo Robalino, President of the AUCC, October 2014.
39 Interview with Ana Cristina Flores, Director of the Citizen Participation Department of the Municipality, October 2014.
40 Interview with Natalia Riera, from Xarxa, October 2014.
41 The political movement “Vivir Bien – Ally Kawsay” has the pink as the main color of identification.
42 Interview with Alicia Guaján, representative of UNORCAC in the AUCC, November 2014.
43 Interview with Manuel Narváez, AP-35 councilor, November 2014.
44 Interview with José Cueva, Director of the Planning Department of the Municipality, November 2014.
“I think the AUCC is more open than it has ever been, it is not partidized45; there is no such thing like: this person should not be part of the discussion because he/she belongs to AP-35 [...] the AUCC is responsible of impeding its own partidization46.

These arguments easily reflect the political jealousy between the parties more than manipulation on the deliberation itself. However, in the discussion chapter, the partidization issue will be analyzed with a prospective vision in order to point out risks and opportunities of such phenomena.

A different deliberation process takes place outside the AUCC where actually ordinary people attend, bring their needs and somehow have power to decide: the participatory budget. As mentioned before, the participatory budget was first implemented by the mayor Auki Tituaña in 2001. When the Organic Citizen Participation Law came out in 2010, the participatory budget as an obligatory financial tool for managing public budget. How different people see it and whether it is actually delivering power to civil society is presented in the next section (4.2.2.4). However, here is worth telling that the methodology of participatory budget used by the Municipality on 2014 responds to indicators in order to distribute the budget among the rural parishes. One of the indicators was the “demonstrated effort on managing the solid waste”, therefore, those rural parishes that proved good practices regarding SWM would receive more budget47.

4.2.2.4. FIRST INSTITUTIONAL DESIGN FEATURE: DEVO

The degree at which the power to make decisions is devolved to the civil society is maybe the central point in all participatory processes. Even though elaborating around an institutional design feature requires tangible and rigid evidence of such devolution of power, it is important to consider also how the stakeholders perceive it and how they see themselves within the participatory process, because that perception, when expressed in deliberative spaces, can influence the design of an institution, similar to what Giddens says in the structuration theory (1984, in Healey, 2006).

During the XIX annual assembly of the AUCC, a discussion table was meant to address specifically the “system of participation” (named as “citizen participation system” in section 4.1.1) for Cotacachi, an obligatory competence of a GAD (decentralized autonomous government) according to the COOTAD (República del Ecuador, 2010a). In that discussion table, the outcomes of a working group integrated by people from the AUCC and the municipal council were presented; the working group was conformed in 2012, and it had the task of designing the system of participation based on the experience of the AUCC and taking into account the current legislation. The outcomes of the working group, plus the feedback given during the discussion table are actually inputs for the draft of the ordinance that aimed to provide legal ground to the participation in Cotacachi. Therefore here are presented those attempts in which the power is devolved to the civil society.

45 The term “partidized” or “partidization” does not exist or is idiomatically incorrect. However, it used in the local jargon for referring the AUCC’s inclination for a political party. As mentioned in the methodology chapter, this term became one of those in vivo coding terms as it was constantly addressed by some interviewees and was used as a question for later interviews.
46 Interview with Jomar Cevallos, Mayor of Cotacachi, December 2014.
47 Interviews with: Ana Cristina Flores, Director of the Citizen Participation Department of the Municipality, October 2014; Dany Andrade, Director of the Environment Department of the Municipality, October 2014.
As mentioned in section 4.1.1 about Ecuadorian legislation on civil participation, the “empty chair” is meant to be used by a person from the civil society within the municipal council, a decision-making space where ordinances, budgets modifications, resolutions, etc., are discussed and taken. Since its creation, the empty chair has been used by the president of the AUCC. However, for Leonardo Alvear, an ex-president of the AUCC in two terms and user of the empty chair in several times, even though voice and vote are ensured, the person has a disadvantaged situation compared to the rest of the members of the municipal council (mayor and councilors). He argues that they (mayor and councilors) have already quite some knowledge and background details on what it is being discussed; thus saying: “[...] one vote is not enough [...]”. Additionally he mentions that through the ordinance that is under construction, they (AUCC) would like to ensure that the empty chair is not only for one meeting when the decision is to be taken, but also to assist to the working meetings and debates upon the topic “[...] so the councilors and us stand at the same level of power”.

However, the draft of the ordinance does not mention the last statement.

Ana Cristina Flores, the Director of the Citizen Participation Department of the Municipality and former AUCC collaborator also sees the empty chair as a “[...] limited space of participation [...]”. She also comments on the “planning cantonal council” (referred as “local planning council” on section 4.1.1) saying that even though 30% of the people who conforms it is from civil society, is still a minority against the number of the municipal authorities who conform it, being also a limited space of participation and suggesting the possibility of including more members from the CPP so at least a 50% is achieved.

Another topic around which the devolution of power can be addressed is the participatory budget. It is true that this approach somehow empowers the habitants of a territory, but how do the actors of Cotacachi see it? There are several claims and opinions regarding this matter; first the fact that the president of the AUCC thinks that the participatory budget methodology has to be leaded by the AUCC since they see themselves as an autononomous organism. Actually one of the aims of a Spanish NGO Xarxa is to provide technical support to the stuff of the AUCC so in the next participatory budget execution they have higher incidence and gender concepts are included on it. Looking at the draft of the cantonal system of participation ordinance, it is stated that “[...] the methodology will be annually proposed by the Planning, Participation and Financing Departments of the Municipality in coordination with the planning cantonal council [...]”, in other words, the AUCC would still not play a major role in the participatory budget procedure. Whether or not the AUCC manages to take a bigger part in the participatory budget, the Director of Planning of the Municipality has a different opinion of the participation exercise itself:

“I agree with the fact that the AUCC should take a bigger role, as long as the methodology entails a long term vision and not a yearly activity because is not working [...] it is a show, a market of offerings, because you have a communitarian leader rotating through all the topic tables requesting infrastructure and financial support for projects; that is not a truly participation exercise.”

The mayor has also a critic towards the participatory budget itself related to how people from the communities and the AUCC see it: “[...] that is the first inconvenience, to see the participatory budget only as a source of money instead of an opportunity for improving the public income”. He also sees the transference of the responsibilities upon the participatory budget to the AUCC as a

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48 Interview with Leonardo Alvear, ex-president of the AUCC in two terms, September 2014.
49 Interview with Ana Cristina Flores, Director of the Citizen Participation Department of the Municipality, October 2014.
50 Interview with Natalia Riera, from Xarxa, October 2014.
51 Interview with José Cueva, Director of the Planning Department of the Municipality, November 2014.
more complicated process because “[...] applying the participatory budget is not a matter of going to the rural parishes and use the seven indicators to distribute the money [...]”, nevertheless, he is open to work in coordination with the AUCC for the coming participatory budget processes 52.

Talking in more general terms, when asking whether the power has been devolved to the civil society or whether the participatory process has power to make decisions, the perceptions can be represented by the following answer:

“[...] that is our [AUCC] ultimate goal [to hold more decision-making power]. What we do now is take decisions, generate the resolutions, and hand them to the municipal council; some are considered, some are rejected. That is way we need to be at the same level of power within the Municipality so our resolutions are considered and respected” 53.

It is interesting to contrast this position to the ones from the municipal officials; two testimonies from people who have not been in the AUCC lines but in the Municipality side for many years. Manuel Narváez, the AP-35 councilor, thinks that giving higher levels of power to the civil society is “[...] dangerous, because the citizens are not fully aware of the laws, whereas the Municipality has to follow the laws [...] Believing that the civil society should have full power for taking decisions is wrong” 54. This is partially supported by Luis Baldeón, the Director of the Financial Department who says “[...] I totally agree with the role of the AUCC, but I think it should be understood as a sharing practice between the citizens’ requests and the technical knowledge provided by the Municipality” 55.

As a final remark of this section, Ana Cristina Flores expresses that nowadays the participatory process of Cotacachi is going through a “[...] transition, and wants to recover ground in participation matters, getting back the power to take decisions that once had it [...]” 56. Her statement depicts hopeful and positive perception towards the participatory process; this may respond to the fact that she took part of the AUCC since the first day in 1996 as part of the childhood discussion table, and now is working for the Municipality under the Vivi Bien – Ally Kawsay movement, a political party that aims to strength the participation in the canton (Movimiento Vivir Bien, 2014).

4.2.2.5. SECOND INSTITUTIONAL DESIGN FEATURE: CENTRALIZED SUPERVISION AND COORDINATION

This institutional design feature states that the EPG experiments should perform a coordinated decentralization yet not a total autonomy mainly due to accountability issues. The interviewees were requested to comment on these issues, thus they see the coordination with other levels of government as a vital approach but regarding the autonomy, they defend it as a fundamental principle even though they know the AUCC (by law) financially depends on the local government.

“We see the AUCC as an autonomous organism, free of all political party compromise [...] in that way we can openly express all our opinions and points of view without thinking that the Municipality will remove the financial support. Let us say that the Municipality is giving us

52 Interview with Jomar Cevallos, mayor of Cotacachi, December 2014.
53 Interview with Leonardo Alvear, ex-president of the AUCC in two terms, September 2014.
54 Interview with Manuel Narváez, AP-35 councilor, November 2014.
55 Interview with Luis Baldeón, Director of the Financial Department of the Municipality, November 2014.
56 Interview with Ana Cristina Flores, Director of the Citizen Participation Department of the Municipality, October, 2014.
50,000 US Dollars [which will be transferred to the AUCC for 2015], it does not mean that they can blackmail us or tell us what to do [...]”57.

As we can see, the perception of autonomy is menaced by the financial issue, because the local assemblies do not have financial support from the central government but from the respective local government by law since 2010, when the Citizen Participation Law was created. Before the existence of the law, the financing of the AUCC was entirely dependent on the political willingness, therefore they perceive this need of autonomy.

“In the beginning [ex-mayor Tituaña time] there was a very strong link between the AUCC and the Municipality, but when the separation occurred, the organizations’ weakening came [...] The feelings and the comments within the AUCC questioned its future existence because with no municipal support, it was hard to envision its survival [...] the AUCC was always very dependent from the Municipality, we were created by the Municipality. However, we (AUCC) realized the power we have and that we can make the ones across the street58 to shake. For all these reason we are designing the System of Participation in such a way that even though a municipal administration with a different political inclination is on office, the AUCC can still play a key role in the local participatory process”59.

In addition to that, is fair to mention that when the relationships between the AUCC and the Municipality were not the best, the AUCC found direct and indirect financing thanks to national and international NGOs such as CARE, Norwegian People’s Aid (APN), Oxfam, Xarxa Consum Solidari, Urban Research Center CIUDAD, PRODECI, among others, which until today are giving technical and financial support to the AUCC and the organizations of the CPP. The mayor Jomar Cevallos also played a key role providing technical support and promoting autonomy when he was in the AUCC side, which is a position still maintained:

“One in the ordinance we accept and maintain the principle of autonomy even though we know is a risk because there could be the case that they adopt a position against us; however we understand that it should be an independent space because it is conformed by civil society organizations”60.

Indeed the draft of the ordinance intends to make clear the autonomy of the AUCC. However, according to the president of the AUCC and the mayor of Cotacachi, setting in an ordinance the amount of money as to be transferred to the AUCC does not grant the financing in the long term, because if the “opposition” has a majority in the next administration, the ordinance could be revoked in the municipal council dissolving all the efforts made during the current administration. In respond to that, the scholar Pablo Ospina from the Andean University Simon Bolivar says:

“[...] if a Municipality decides who participates and who does not, then the autonomy is lost. The AUCC demonstrated autonomy because it was born with Auki Tituaña, and when Tituaña lost the elections, there was a danger of disappearance. However, the AUCC managed to overcome such drawback and now it has to demonstrate that does not depend on the [current] mayor [...] Ordinances can be easily done and easily revoked, the only certain guarantee is the strength that the AUCC has to represent the civil society”61.

He suggest for instance that autonomy should not be understood as a concept that needs to be in a paper in order to guide further action. Instead, Ospina highlights the legitimate autonomy

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57 Interview with Leonardo Alvear, ex-president of the AUCC in two terms, September 2014.
58 The office of the AUCC is right across the park from the Municipality one.
59 Interview with Ana Cristina Flores, Director of the Citizen Participation Department of the Municipality, October 2014.
60 Interview with Jomar Cevallos, mayor of Cotacachi, December 2014.
61 Interview with Pablo Ospina, researcher from the Universidad Andina Simón Bolivar, December 2014.
shown by the AUCC, pointing out that efforts should be invested in the latter rather than the envisioning autonomy in an ordinance.

4.2.2.6. THIRD INSTITUTIONAL DESIGN FEATURE: STATE-CENTERED, NOT VOLUNTARISTIC

Colonization of power is what Fung and Wright (2003) emphasize for this institutional design feature in order to, once achieved the power positions, promote and implement participation and democratization of decisions; yet, political-electoral processes do not fit within feature. Nonetheless, Leonardo Alvear clearly stated the opposite:

“When we used to attend to the workshops in many places of the country, we were always supporting and proposing the taking of power, and then they would say: “you should create a political party”. We are not politicians, we thought, but we could facilitate the creation of a political party […] It does not mean that the AUCC has a political party, but we only support it […] So that was the idea, to create a political movement from the participatory process that would open the path and facilitates the taking of power.”

The political party that “was born” in the AUCC is currently driving the Municipality. Their work seems to be a promising panorama for the AUCC and the whole participatory process, but at the same time, this issue raised critical opinions from the opposing political party as it has been shown in the section 4.2.2.3.

One bottom-up experience in the solid waste regard is worth mentioning within this section because it can be an example related to why the EPG theory states that a voluntaristic approach is not enough to generate major changes at an institutional level. The details of such bottom-up initiative are presented in the section 4.3.2, it is a project of a group of young people who started collecting plastic bottles and building trash bins meant to collect more plastic bottles. The project grew in terms of numbers of volunteers and people involved; schools students were also involved. However, in relation to this institutional design feature, the lack of coordination and engagement of the public administration, among other factors, provoked the cease of the activity.

4.2.2.7. ENABLING CONDITIONS

Several condition can either enable or hamper the participatory governance processes, but the equity of power among the stakeholders is considered the most important for Fung and Wright (2003). A number of testimonies from the Cotacachi actors address the equity of power and how they see it. For example, when asked whether the participatory process (or the AUCC) has the same level of power as the Municipality, most of the respondents said that it still has not been achieved, naming the empty chair or the planning cantonal council as examples (section 4.2.2.4); however, a sincere opinion caught my attention:

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62 Interview with Leonardo Alvear, ex-president of the AUCC in two terms, September 2014.
63 Interviews with: Sebastián Alvear, co-creator of the plastic bottle bins project, October 2014; Dany Andrade, Director of the Environment Department of the Municipality, October 2014.
“[...] no, no, no, honestly not. Because now that I am inside the Municipality I understand that whoever has the money has also the power, and is up to the Municipality and their political willingness how to spend it”\textsuperscript{64}.

Either pessimistic or realistic, this point of view shows that it is important to take into account the fact of raising awareness among the population, especially of those who are involved in the participatory process, about how actually things work.

Another variable that plays an important role in the endeavor of assuring equity of power is the literacy of the citizens. Since the Cotacachi canton opted for the participatory democracy, the illiteracy was reduced from 22.3\% in 2001 to 2.5\% (Municipio de Santa Ana de Cotacachi, 2008). However, as quoted in the section 4.2.2.2, the testimony “[...] yes I have heard of the AUCC, but since we are illiterate, they do not take us into consideration”\textsuperscript{65}, shows a position from one of the solid waste BUP, not only addressing the fact of illiteracy, but how she sees the participatory process.

There is another issue raised by Alicia Guaján, the representative of UNORCAC in the AUCC. She is indigenous and even though she speaks proper Spanish, she sees the language as a limitation especially in workshops and deliberations spaces like the annual assemblies of the AUCC. She comments:

“There were methodological inconveniences during the last annual assembly of the AUCC; there should have been a translator for Kichwa [...] And it is not as easy as picking a person from the public and asking him/her to translate right away, because that is what they usually do. It is more complex, especially if legal or technical topics will be discussed. This has always happened to us [...] Imagine all the efforts and struggle that we go through in order to learn Spanish, and in the other hand the mestizos do not show any interest on learning Kichwa”\textsuperscript{66}.

Indeed the difference of language can be an impediment to have a smooth and fluid deliberation process, not to mention the cultural differences and cosmovision (or worldview) between indigenous and mestizos that could also hinder the process, an issue that deserves a whole complete study as well. When Alicia addressed the claim upon the language barrier, she was referring to a discussion table which topic was the “basic services public company creation”. In that discussion table, the majority of participants belonged to the indigenous communities from the Andean Zone. Basic services include: drinking water, sewage water and solid waste recollection, however, the discussion got enmeshed around the water management competences and responsibilities, a sensible topic country-wide when comes to rights and access to water, a historical claim from the indigenous people. The facilitators of the discussion table were part of the Municipality staff, which were pushing for a resolution that addresses the creation of such public company, whereas the indigenous leaders, reluctant to agree on the creation, claimed for a prior socialization of the project within the indigenous communities\textsuperscript{67}. Difficulties in the communication were observed; several interventions from the public were in Kichwa under the claim of an easier way to express. Nevertheless, after a heated discussion, the resolution from that table was indeed the socialization of the project within the indigenous communities.

\textsuperscript{64} Interview with José Cueva, Director of the Planning Department of the Municipality, November 2014.
\textsuperscript{65} Interview with an indigenous lady who collects household organic waste for her pigs, October 2014.
\textsuperscript{66} Interview with Alicia Guaján, representative of UNORCAC in the AUCC, November 2014.
\textsuperscript{67} Observations and memorandum of the XIX AUCC annual assembly held in La Calera community, October 2014.
4.3. CHARACTERIZATION OF THE SOLID WASTE MANAGEMENT (SWM) OF COTACACHI

Here the findings upon the concepts and issues raised in the theoretical framework chapter related to the Multi-level perspective (MLP) are presented. The testimonies from the interviewees and observations have been grouped in the three levels (socio-technical regime, niche and sociotechnical landscape) of the MLP. These constitute the themes that describe the practices, beliefs, novelties, norms and external influences around the SWM of Cotacachi that depict a potential sustainable transition.

4.3.1. THE SOLID WASTE MANAGEMENT (SWM) REGIME

As mentioned in the section 2.3.1 from the theoretical framework chapter, there are several elements that conform the SWM regime. The ones considered for this study include a description of the practices performed by the Municipality (which includes the citizens as the users), the ways the local authority solve the problems, the competences over the SWM issue, and the regulations around it.

In article 55, section (d) of the Organic Code of Autonomy, Decentralization and Land Use Planning (COOTAD) defines the solid waste management (SWM) as an exclusive competence of the municipal governments (República del Ecuador, 2010a). The Municipality officials in charge of this issue are aware of this responsibility and proudly describe how the service is provided in Cotacachi, which is also referred as the formal SWM. Two collection trucks cover the Urban Zone on a daily basis from Monday to Saturday with the task of receiving organic waste (Monday, Wednesday and Friday) and inorganic waste (Tuesday, Thursday and Saturday) separately. A third collection truck covers 38 indigenous communities of the Andean Zone, being each one visited once a week where only inorganic waste is collected. Each collection truck has a big speaker that plays a song with messages related to organic and inorganic waste separation, but also is meant to aware the citizens that the truck is approaching to their houses and that they have to put their trash bags outside. Some people put the trash bags on the side walk, and some hung them in the wall to avoid street dogs spreading the solid waste out, a common phenomenon observed in the Cotacachi canton (Annex 2, Illustration 1). The organic waste is delivered to a farmers’ association who are using it to improve the quality of the soil (Annex 2, Illustration 2), and the inorganic waste is taken to the final disposition facilities located in the outskirts of the Cotacachi city. The final disposition facilities include a separation-recovery section and the landfill (Annex 2, Illustrations 3 and 4). Five people hired by the Municipality work in the separation-recovery section, separating by hand the recyclable waste (e.g. plastic, paper, metals, glass, etc.); the recyclable

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68 Interview with Jacinto Guerra, official within the Environmental Department of the Municipality, October 2014.
waste is sold to people who is authorized\(^6^9\) to buy, transport and process or sell it again\(^7^0\) (Figure 6).

**FIGURE 6. COTACACHI SOLID WASTE MANAGEMENT DIAGRAM**

Besides describing the practices around SWM, the beliefs and opinions upon “what is the best way of managing the solid waste” was requested from the interviewees. Hence, these were the answers: “[...] with a technical management of the landfill [...]” (Director of the Environmental Department of the Municipality); “[...] raising awareness for source separation [...]” (municipal officials, Director of the Financial Department and the AP-35 councilor); “[...] through incentives and coercive measures or carrot and stick\(^7^1\) measures” (Director of the Planning Department of the Municipality and the president of the AUCC); “[...] separating and recycling [...]” (person from Oxfam and the representative of the UNORCAC in the AUCC). These answers suggest that the current SWM practices accomplished by the Municipality, with a technical and educational approach, have an important influence on people’s discourses. In the other hand, none of the interviewees addressed those practices performed by BUP, which are detailed in the next section.

Even though the Municipality of Cotacachi complies the law by (partially) providing the service of solid waste management to inhabitants, it is facing some problems mainly due to financial and technical limitations. The Director of the Environmental Department of the Municipality mentions the following problems; the first three were pointed out as inheritance from the previous administration whereas the last two due to financial limitations\(^7^2\):

\(^6^9\) The Ministry of Environment of Ecuador is the national authority in terms of solid waste management among other issues. The provide licenses to people or companies whose activity is related to trading and processing of solid waste.

\(^7^0\) Interview with Francisco Grijalva, official within the Environmental Department of the Municipality, October, 2014.

\(^7^1\) According to the Cambridge dictionary, it an expression used for “a system in which you are rewarded for some actions and threatened with punishment for others” (Cambridge University Press, 2015).

\(^7^2\) Interview with Dany Andrade, Director of the Environmental Department of the Municipality, October 2014.
The waste in the landfill is not being compacted and it will collapse within the next two years.

- The hospital waste is not being sterilized and is being mixed with the normal waste.
- The leachate, or wastewater generated in the landfill, is not being treated and thus directly dumped to the river.
- There is a lack of personnel in the separation-recovery section of the final disposition facilities.
- The collection and treatment of the solid waste is not being done in the rural parishes of the Íntag Zone.

From the above problems mentioned, only the one about the lack of solid waste collection and facilities in the Íntag Zone was discussed with the citizens (or requested by the citizens) during the participatory budget process. The outcomes of the participatory budget were presented in the plenary of the XIX annual assembly of the AUCC; the aim of presenting those results was for validation purposes, in other words, the participatory budget results would be endorsed by the AUCC, so the Municipality can proceed to implement. The amounts and SWM projects for each parish are specified in the Table 5.

![Table 4](#)

**TABLE 4. PARTICIPATORY BUDGET RESULTS FOR 2015. AMOUNT PER PARISH AND AMOUNT DESIGNATED TO SOLID WASTE MANAGEMENT**

<table>
<thead>
<tr>
<th>Parish beneficiary</th>
<th>Designated amount (US Dollars)</th>
<th>Project related to SWM for each parish</th>
<th>Amount for SWM</th>
<th>% of designated amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Cotacachi</td>
<td>$ 585.590</td>
<td>Collection containers</td>
<td>$ 15.000</td>
<td>3%</td>
</tr>
<tr>
<td>Rural Cotacachi</td>
<td>$ 404.706</td>
<td>Containers on rural communities which receive collection service</td>
<td>$ 20.000</td>
<td>5%</td>
</tr>
<tr>
<td>Quiroga</td>
<td>$ 221.268</td>
<td>Collection and final disposition system in the communities</td>
<td>$ 20.000</td>
<td>9%</td>
</tr>
<tr>
<td>Imantag</td>
<td>$ 221.984</td>
<td>Collection and final disposition system in the communities</td>
<td>$ 10.000</td>
<td>5%</td>
</tr>
<tr>
<td>Apuela</td>
<td>$ 170.088</td>
<td>Integral SWM system, including recycling and (zonal) landfill</td>
<td>$ 10.000</td>
<td>6%</td>
</tr>
<tr>
<td>Cuellaje</td>
<td>$ 180.457</td>
<td>Integral SWM facilities</td>
<td>$ 15.000</td>
<td>8%</td>
</tr>
<tr>
<td>Peñaherrera</td>
<td>$ 130.694</td>
<td>Collection, recycling and recovering SWM system</td>
<td>$ 15.000</td>
<td>11%</td>
</tr>
<tr>
<td>Plaza Gutiérrez</td>
<td>$ 90.000</td>
<td>Feasibility studies and construction of a parish landfill</td>
<td>$ 14.800</td>
<td>16%</td>
</tr>
<tr>
<td>Vacas Galindo</td>
<td>$ 105.000</td>
<td>SWM program</td>
<td>$ 20.000</td>
<td>19%</td>
</tr>
<tr>
<td>García Moreno</td>
<td>$ 179.262</td>
<td>SWM programs in villages of the parish</td>
<td>$ 20.000</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>$ 2'289.049</td>
<td></td>
<td>$ 159.800</td>
<td>6%</td>
</tr>
</tbody>
</table>

The amounts for SWM projects detailed in the Table 5 respond to necessities considered priorities within each parish. Hence, higher numbers in the percentage could reflect a higher need of the parish to implement SWM measures in relation to other issues like drinking water, sewage systems, sports facilities, sidewalks, and so forth. While visiting the rural parishes and doing observations on the SWM practices, most of the villages have managed to have a collection systems. Nevertheless, none of them except one (the Cuellaje parish, Annex 2, Illustration 5) has

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73 Observations during the XIX AUCC annual assembly held in La Calera community, October 2014.
Results: Unfolding the Participatory Process and the Solid Waste Management (SWM) of Cotacachi

final disposition facilities with a separated (organic and inorganic) source separation. The observed ways of “getting rid of the waste” were: open air dumping places, sometimes in a cliff next to a river (Annex 2, Illustration 6); and for those who do not receive the collection service, they dump directly to the closest river, make a hole on their backyard or simply they burn the waste.

The three officials of the Municipality involved with the SWM of the canton are aware of such inconveniences, but also referred to the SWM outcomes of the participatory budget in a positive way, pointing out the importance of taking decisions based on the citizens’ opinions. However, more related to the urban context, they agree on the fact that more workers are needed in the separation-recovery section of the final disposition facilities, so less waste is deposited in the landfill, but the financial limitations impede the hiring of more people\textsuperscript{74}. Apparently, the officials of the Municipality in charge of the SWM consider the technical approach, supported by financial resources, as the best way of dealing with the solid waste.

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4.3.2. THE SOLID WASTE MANAGEMENT (SWM) NICHE

Besides observing and gathering data related to the formal ways the Municipality deals with the solid waste, other practices (novelties) performed by citizens, in this study referred as solid waste bottom-up practitioners (BUP) were also part of the field inquiry. They can be summarized in the following four activities:

- Collecting recyclable inorganic waste for selling purposes such as plastic bottles, paper, cardboard, glass, metals, etc.
- Collecting organic waste to feed animals, mainly pigs and guinea pigs. (Annex 2, Illustration 7).
- Collecting and reusing inorganic waste for educational and rising awareness purposes.
- Individuals managing their own organic solid waste at a household level.

Collecting recyclable waste with the aim of profit was the most common found and widespread activity throughout the whole canton. A total of thirteen of this solid waste BUP were interviewed and classified into two categories: the primary waste collectors (Bari et al., 2012), people who collect recyclable waste from households, dustbins, and after public events; and the intermediaries, people who buy the recyclable waste from the primary waste collectors and sells it to waste recycling factories.

Regarding the organic waste BUP, seven cases (sometimes in couples) were found in the Urban Zone of Cotacachi; all of them were indigenous women who live in the communities located in the surroundings of the city. They mainly perform this activity during the organic waste collection days scheduled by the Municipality (Monday, Wednesday and Friday). They take the useful waste in the lapse of time between the moment citizens put the trash bags out of their houses and the moment when the collection truck picks it up (Annex 2, Illustration 8). As mentioned in the section 4.3.1, within that lapse of time some street dogs open the trash bags in search of food, spreading out the content. Some of these organic waste collectors have reached an agreement with households and restaurants that accumulate the waste for them. However, the BUP complained

\textsuperscript{74} Interviews with: Dany Andrade, Jacinto Guerra and Francisco Grijalva, Director and officials respectively from the Environmental Department of the Municipality, October 2014.
with the fact that since more people is doing it, some households have started to sell the organic waste.

**TABLE 5. ACTIVITIES AND PROJECTS PERFORMED BY SOLID WASTE BOTTOM-UP PRACTITIONERS.**

<table>
<thead>
<tr>
<th>Project</th>
<th>Description of the Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>“6 de Julio” School plastic bottles collection project</strong></td>
<td>Since five years ago, the school has a policy of asking for 100 plastic bottles to each student in the beginning of the year with the aim to raise awareness among the students, who learn about the importance of recycling. The parents are also the targets of the measure, because they have to help their children to get such amount of bottles. “Besides the students, we also engage the parents and they have responded positively, they even come with more than what is asked […]”75. The school sells the material and buys medicines for the first aid kid.</td>
</tr>
<tr>
<td><strong>“Luis Ulpiano de Latorre” High School plastic bottles collection project</strong></td>
<td>The high school has an Institutional Plan that includes the recycling of plastic bottles, which is currently managed by the Department of English. They contacted the Municipality asking for support and received a container, which can store around 15 kilos of plastic bottles. The students are encouraged to bring plastic bottles, thus receiving academic incentives; however, they do not have a structured plan for engaging the students. They sell the material in order to buy teaching material like dictionaries, English posters, computer software, etc.76.</td>
</tr>
<tr>
<td><strong>“José Peralta” Agricultural High School composting project</strong></td>
<td>This high school is located in the Peñañaherrera village, a parish under the same name of the Intag Zone. In coordination with the Water Association of Peñañaherrera, the agreed on receive the organic waste collected from the households of the village. With the material the students were taught how to use some techniques of composting and then apply it to the soil. However, the households stopped separating the solid waste and the high school did not receive the material anymore77.</td>
</tr>
<tr>
<td><strong>Handcrafts and toys making</strong></td>
<td>This lady collects plastic bottles in order to make handcrafts, school material and toys for her children. At the same time, she teaches them the importance of recycling: “[…] now my youngest son does not come back home without a plastic bottle […]”78.</td>
</tr>
<tr>
<td><strong>Plastic bottle bins project</strong></td>
<td>The project consisted on the elaboration of trash bins made out of plastic bottles. It started with a few volunteers but rapidly caught the attention of other young people whom decided to give environmental education in the “Luis Ulpiano de Latorre” High School as an extracurricular (but compulsory) subject for students. They managed to produce ten trash bins, which were distributed in different parts of the city, conceived only for collecting plastic bottles. “The people responded and we had to empty them every week […]”79. Nevertheless, the project is not running anymore due to time availability of the volunteers and lack of external support.</td>
</tr>
<tr>
<td><strong>“Wambra Wasi” youth group handcrafts project</strong></td>
<td>The “Wambra Wasi” youth group gathers 70 high school students who receive economic aid from the catholic international institution CARITAS. Among other educational and recreational activities, they received workshops on how to make handcrafts out of newspaper, which has been exposed in art exhibitions and sometimes even sold. Besides the recreational activity itself, through the handcrafts they show that “[…] many things can be made with what is considered waste”80.</td>
</tr>
</tbody>
</table>

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75 Interview with Jaime Cazar, Director of the “6 de Julio” School, November 2014.
76 Interview with Luis Alberto Yamberla, English teacher of the “Luis Ulpiano de Latorre” High School, November 2014.
77 Interview with the composting project coordinator teacher from the “José Peralta” Agricultural High School, December, 2014.
78 Interview with Alba León, inhabitant of Apuela, December 2014.
79 Interview with Sebastián Alvear, co-creator of the plastic bottle bins project, October 2014.
80 Interview with the president of the “Wambra Wasi” youth group of Imantag, November 2014.
The third group of BUP is related to educational and raising environmental awareness purposes. This group of BUP include two school projects of collecting plastic bottles, a school project meant to teach students how to compost and two projects from youth groups, and an individual one related to reusing the inorganic waste to produce handcrafts or trash bins. These activities and projects are detailed in the Table 6.

Regardless of the fact that the Municipality provides the collection service of organic waste in the Urban Zone, some inhabitants of the Cotacachi city deal with their own organic waste. These people are considered the fourth group of BUP. Even though this study does not provide an exact number of people who deal with their own organic waste, some interviewees shared their experience as evidence:

“[...] I have some fruit trees and chickens in my backyard, I put the organic waste there [...] and they do the job of mixing it with the soil”81.

“[In the rural areas of the Cotacachi canton] the organic waste is not considered as such since we needed it for our fields as a fertilizer”82.

“[...] we separate it at home and the organic matter comes back to the soil in our properties”83.

Similar comments from other interviewees evidenced also that almost every rural household uses the organic waste for their orchards. Quantifying the amount of solid waste generated was not the aim of this study; however, there is a bachelor thesis meant to collect base line information of household solid waste generation of the Peñaherrera rural parish located in the Íntag Zone. The author states that each person produces 0.15 kilos of organic waste per day, representing 60% in weight of the daily total waste (Cadena, 2010). Despite the fact that such study was restricted to one rural parish, it gives an idea of the waste generation patterns of the inhabitants of the rural areas. Moreover, when thinking that the inhabitants deal with they own organic waste, the amount of waste that the Municipality does not have to deal with is significantly high.

As a closing remark of the niche characterization, it is worth to mention that the activities performed by BUP should not be understood as the total number of activities that exist throughout the canton. The activities here addressed represent a sample of many more activities that people could be doing in the SWM domain. Nevertheless, these activities evidence that some people is looking at the solid waste in a different way. While the average inhabitant of Cotacachi sees the solid waste as something to get rid of as soon as possible, other people consider the solid waste as an opportunity to make a living or for educational purposes.

4.3.2.1. OPINIONS OF STAKEHOLDERS INVOLVED WITH SOLID WASTE MANAGEMENT (SWM) ON THE NOVELTIES PERFORMED BY THE BOTTOM-UP PRACTITIONERS (BUP)

When conducting interviews with several actors involved with the participatory process and the SWM of Cotacachi, their opinion upon the activities performed by BUP was requested. Since the Municipality is the authority concerning SWM of the canton, their points of view have more

81 Interview with Leonardo Alvear, ex-president of the AUCC in two terms, September 2014.
82 Interview with Alfonso Morales, president of the UNORCAC, October 2014.
83 Interview with José Gordón, president of the San José de Magdalena community located García Moreno parish, October 2014.
weight due to their position as decision-makers in that regard. Thereby, the officials of the Municipality are aware of the existence of the organic and inorganic waste collectors, however, they disagree with their existence for several reasons. First, they argue on the illegality of what these BUP are doing, adding that they must be qualified by the Ministry of Environment if they want to collect waste. Second, the municipal officials mention that these people should not continue collecting waste in that way because they are risking their health. Third, these BUP are blamed of spreading out the waste in the street and sidewalks. Nevertheless, the Director of the Environmental Department of the Municipality stated “[…] if they would conform an organization or an association, we [the Municipality] would not have as much waste in the landfill as we do”. This comment totally matches with a testimony shared by the president of the National Network of Recyclers of Ecuador (RENAREC)\textsuperscript{84}, a strong advocate on behalf of the informal collectors. She says “[…] when I approached to the Zonal Administration of “La Delicia” [north of Quito, capital of Ecuador] they offered to help me as long as we [the informal recyclers] work in an associative and organized way”\textsuperscript{85}. Even though it is clear that the municipal officials from Cotacachi are not happy with the presence of these BUP, the door is open for new opportunities of cooperation. According to Felipe Toledo, who speaks on behalf of AVINA, a nongovernmental organization that supports the inclusion of BUP into the formal SWM system through articulation between stakeholders, this open door for cooperation should be embraced and harnessed:

“I think that the participatory solid waste management must be a reality, because there is no environmental issue in public management which does not include the citizen participation in coordination with the local governments.”\textsuperscript{86}

This suggests that outside the Cotacachi realm, other experiences of BUP inclusion have improved the local SWM system. However, looking at the other side of the coin, the opinions of the primary waste collectors and intermediaries of Cotacachi were documented as well; they are aware that their practices are not welcomed by the municipal officials:

“[…once they [Municipality officials] told us that collecting the waste is forbidden, but since we are not stealing, we are not doing anything bad. They have threatened us, they told us that we will go to jail, are you one of those persons sent by the Municipality?”\textsuperscript{87}

Similar opinions were provided by the organic waste collectors, who on top of that, are reluctant to associate and work together since they claim to “own” some parts of the city for collecting purposes. Hence, territoriality and competitiveness seem to prevail among them as one lady complains: “[…] several people do this [collect organic waste], they sometimes even come to this side of the city, but we do not allow them because this is our territory”\textsuperscript{88}. In the other hand, some inorganic waste collectors from both categories, primary waste collectors and intermediaries, are open to cooperate if there is a possibility. Furthermore, despite the fact they have not heard

\textsuperscript{84} The National Network of Recyclers of Ecuador (RENAREC) is an association of 33 organizations (more than 1000 families) national-wise dedicated to collect recyclable waste in the streets and dumps. The goal of RENAREC is to get legal recognition and become partners of the local authorities in the solid waste management, skip the intermediaries, and improve the quality of life of the people dedicated to this activity. Interview with Laura Guanoluisa, president of the National Network of Recyclers of Ecuador (RENAREC), November 2014.

\textsuperscript{85} Interview with Laura Guanoluisa, president of the National Network of Recyclers of Ecuador (RENAREC), November 2014.

\textsuperscript{86} Interview with Felipe Toledo, from AVINA Ecuador, October 2014.

\textsuperscript{87} Interview with a BUP (requested to remain anonymous) who collects inorganic recyclable waste, October 2014.

\textsuperscript{88} Interview with a BUP who collects organic waste, October 2014.
about the AUCC, they shown interest and were curious about the participatory process and people gathering together and deliberating.

Other officials from the Municipality and individuals from the civil society referred to the BUP in a positive way asserting that “[...] it is easier if they [the BUP] do the job; if they are already doing that work, why not to promote it? In that way the work load of the Municipality would be reduced” 96. Alicia Guaján, the representative of the UNORCAC in the AUCC also agrees saying: “[...] we have that mission and vision, to give a hand to whom needs it the most [...] we would create job opportunities for the ladies in the indigenous communities and reduce the amount of waste that goes to the landfill” 96. This awareness of fostering novelities to be part of the formal SWM system is also addressed by a BUP who works as an intermediary of recyclable inorganic waste

“I help the Municipality because they do not manage to deal with all the waste; before I start collecting, the people used to put their waste out of their houses and the dogs used to spread it out. Instead, I help to keep the city cleaner, therefore, the Municipality should support me.” 98

It seems that the perception and understanding of the current SWM regime is not restricted only to cope the problem using a technocratic approach. Nevertheless, none of the stakeholders of Cotacachi addressed a clear strategy of how to foster such regime transition towards a new SWM functioning, which includes the actions, links, and networking of the BUP.

4.3.3. THE SOLID WASTE MANAGEMENT (SWM) LANDSCAPE

Defined as the “[...] demographical trends, political ideologies, societal values and macro-economic patters” (Geels, 2011:28), the socio-technical landscape is hardly influenced by the stakeholders in the short term. Examples of these hard-to-influence elements can be identified within the socio-technical landscape of Cotacachi in the SWM regard. One of them is the international SWM trend that has demonstrated the benefits of the inclusion of BUP (especially informal collectors) to the SWM regimes. A second one is the fact of being an informal collector represents a livelihood upon which several families depend on. A third one is the set of national policies related to competences (already addressed in 4.3.1) and SWM regulations. A final one is the political ideology that the Vivir Bien – Ally Kawsay movement holds, which pursues the strengthening of the participatory process. Findings about these four elements are now provided.

Firstly, it has been demonstrated that including such informal practices into the SWM system of a city has several positive environmental, economic and social impacts. Paul et al. (2012) conducted a study about informal waste collectors’ inclusion to the SWM system of Iloilo City (Philippines); the authors assert that the informal collectors’ role within the SWM system improved their livelihood and quality of life. Moreover, the informal collectors’ activities helped lessening the environmental impact generated by the landfill (leachate and greenhouse gases), extending its lifetime. This is confirmed by a testimony of Laura, a lady who once was an informal waste collector.

96 Interview with José Cueva, Director of the Planning Department of the Municipality, November 2014.
97 Interview with Alicia Guaján, representative of the UNORCAC in the AUCC, November 2014.
98 Interview with Luis Alberto Farinango, an intermediary bottom-up practitioner who buys and sells recyclable inorganic waste, November 2014.
collector and now she and her association are considered partners of the SWM system of Quito, the capital city of Ecuador:

“The work we do is for the future, for the environment, for our children, if we would not do the recycling, all the waste would end up in the landfill, therefore we help lengthening its lifetime”\(^{92}\).

Promoting the inclusion of informal collector helped to save money in municipalities in East Africa (van Buuren et al., 2014) and Philippines (Paul et al., 2012). Furthermore, supporting the informal collection sector strengthened the social and small-scale business relations among the actors involved in the recyclable solid waste recovering activity as it occurred in Rajshahi, Bangladesh (Bari et al., 2012) and Bali, Indonesia (MacRae, 2012). Surprisingly, in some cities of Nigeria and Tanzania, the incomes from performing waste recovery activities surpassed the minimum wages (Sasaki and Araki, 2014). In this way, evidences on the second element (waste picking as a livelihood) that embodies the landscape level is presented. On this regard, Laura advocates for the waste picking as a livelihood activity as such saying:

“Even though some municipalities and the society in general do not take serious our work [recyclable waste picking], this is our job and we do it with love because it is the livelihood for our families; with our income we can get food and give education to our children”\(^{93}\).

Moving on to the third landscape element (SWM national policies), the Ecuadorian Government through the Ministry of Environment launched in 2010 the Integral Solid Waste Management National Program (PNGIDS). Within that policy document, the chapter four addresses the “social and economic inclusion”, recognizing the in Ecuador there are more than 20,000 informal waste collectors working under unsafe conditions whom require to be included into the value chain of the solid waste (Ministerio de Ambiente del Ecuador, 2012). It is obvious that international and national experiences of informal collectors’ inclusion, plus Ecuadorian policies regarding solid waste put pressure on the SWM regime of Cotacachi. Such trend is clearly expressed by Velis et al. (2012: 44) as a broad “[...] consensus among all stakeholders and expert that informal sector in general, and the IRS [informal recycling sector] in particular, should not and, in fact, cannot be ignored while attempting to improve waste and resource management systems in developing countries”.

By definition, ideologies are also part of the landscape level (Geels, 2011); hence the ideology advocated by the Vivir Bien – Ally Kawsay political movement is the fourth element of the landscape level in the Cotacachi context. This political movement promotes a “[...] living democracy, with freedom, autonomy, and diversity of opinions”\(^{94}\) regarding the decision and policy-making process of public concerns within the Cotacachi territory. This statement means that SWM (seen as a public concern issue) can be also subject of participatory decision-making process, contrary to how the decisions are currently taken. In the next chapter (section 5.2) this issue is further discussed along with the other three elements of the landscape level.

\(^{92}\) Interview with Laura Guanoluisa, president of the National Network of Recyclers of Ecuador (RENAREC), November 2014.

\(^{93}\) Interview with Laura Guanoluisa, president of the National Network of Recyclers of Ecuador (RENAREC), November 2014.

\(^{94}\) Mayor Jomar Cevallos’ opening speech in the XIX annual assembly of the AUCC held in the “La Calera” indigenous community, 18 of October 2014.
5. DISCUSSION: TYING UP THE STRANDS OF PARTICIPATION AND SOLID WASTE MANAGEMENT (SWM)

“[…] therefore I tell you, the opposing voices are very important, they must be heard so they broaden our points of view.”

Interview with Leonardo Alvear, September 2014

“The work we do is for the future, for the environment, for our children, if we would not do the recycling, all the waste would end up in the landfill, therefore we help lengthening its lifetime.”

Interview with Laura Guanoluisa, November 2014

In the previous chapter the findings on the participatory process were detailed according to the seven features of the Empowered Participatory Governance (EPG). Also, details of the formal and informal SWM of Cotacachi were described following the three-level structure of the Multi-level Perspective. Additionally, typologies of participation were considered when characterizing the level of empowerment and stakeholders interests related to the participatory process and SWM of Cotacachi. Within this chapter, the answers to the research questions are meant to be discussed in two sections. The first one contributes to the theoretical discussion regarding the EPG; how do the seven features look like in a practical case and their relation with the SWM context of Cotacachi. Also, the first section addresses the field findings (on both: participatory process and SWM) from the perspective of the typologies of participation, contributing in this way to the theoretical and practical debate of participation. The second section of this chapter uses the inputs from the analysis of the citizen participation plus the findings of the formal and informal SWM to describe a hypothetical transition towards an inclusive SWM.

5.1. THE MEANING OF PARTICIPATION FOR THE PARTICIPATORY PROCESS AND THE SOLID WASTE MANAGEMENT (SWM) OF COTACACHI

This section includes two subsections that will discuss the answers to the first and second sub-research questions (SRQ) respectively (SRQ1: How does the participatory process of Cotacachi work if assessed under the EPG principles, institutional design features and enabling conditions;
SRQ2: What are the levels of participation that the citizen of Cotacachi perform within the participatory process and solid waste management? The first subsection aims to interpret the characterization of the participatory process under the lenses of the EPG’s seven features, and the implications for current SWM of Cotacachi. The second subsection addresses the analysis of the participatory process and SWM stakeholders’ performance under the typologies of participation lenses.

5.1.1. THEORY VERSUS PRACTICE: THE COTACACHI PARTICIPATORY PROCESS UNDER THE EMPOWERED PARTICIPATORY PROCESS (EPG) LENSES

The participatory process of Cotacachi, and specifically the Cotacachi Cantonal Unity Assembly (AUCC) present characteristics that match with the EPG features from Fung and Wright (2003). At the same time, some of the AUCC’s characteristics contest the theory and vice versa. Moreover, when comparing the EPG features of the Cotacachi participatory process with the characteristics of the cantonal SWM, opportunities of broadening the inclusionary scope of the AUCC and the cantonal SWM come to the light.

As mentioned in the results chapter (section 4.2.2.1), the AUCC addresses specific topics in the discussion tables during its annual assemblies. These deliberative spaces are conceived to gather the opinions, claims and proposals of the citizens who have a stake on the topic discussed. Furthermore, the Popular Participatory Council (CPP) keeps track and works for the realization of the resolutions of each discussion table. The fact of discussing specific issues in open space for citizen participation makes the AUCC to exemplify the first and second EPG principles: practical orientation and bottom-up participation respectively. Nonetheless, the SWM issue is neither addressed in the discussion tables, nor the SWM stakeholders are taking part of such discussion. Fung and Wright (2003: 24-25) speak about the “effectiveness on problem-solving” when following the two aforementioned EPG principles (practical orientation and bottom-up participation). For Fung and Wright (2003) effectiveness means: empowerment of individuals who have firsthand experience and knowledge in problem solving; robust bottom-up solutions rather than hierarchical top-down technocratic solutions; and the shortening of feedback loops for public action. If the SWM is not being discussed and the stakeholders are not part of such discussion, then the Cotacachi canton would be missing the “effectiveness of problem-solving” in the SWM regard. Addressing practical experiences, Adama (2012) and Paul et al. (2012), scholars who researched SWM governance with an inclusion perspective in Abuja (Nigeria) and Iloilo City (Philippines) respectively, support the fact of considering the inputs of SWM stakeholders in early stages of planning.

The participatory budget, a mandatory planning tool for Autonomous Decentralized Governments (GADs), embrace the first and second principles of the EPG theory. Throughout the participatory budget, specific topics are discussed counting on the presence of ordinary people. Schönleitner (2006) analyzed participatory processes of Brazilian municipalities contesting some of Fung and Wright (2003) concepts. He mentions that participatory budgeting could generate wanted and unwanted outcomes. On one hand, his case studies demonstrated to demise clientelism as a wanted (positive) consequence. On the other hand, some participatory budget processes fragmented already existing organizations. A specific characterization of the participatory budget was not the aim of my study, however, some stakeholders from Cotacachi

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95 The word clientelism is defined as “a social order that depends upon relations of patronage; in particular, a political approach that emphasizes or exploits such relations” (Oxford University Press, 2015).
expressed their opinions on that regard. As mentioned in the results chapter (section 4.2.2.4) the Director of Planning of the Municipality of Cotacachi does not have a positive opinion of the participatory budget. However, other municipal officials like those in charge of the SWM, the Director on Citizen Participation, and the mayor, see it as a promising planning tool that bridges the citizens’ needs to the decision-making process. Nevertheless, observations could not be conducted of this participatory moment since it took place before the field phase. Moreover, only municipal officials were interviewed in this regard. This lack of triangulation sources become a limitation of this study, giving place to further research that could give more attention to the participatory budget process of Cotacachi.

When analyzing the third principle of the EPG theory (deliberative solution generation) the participatory process of Cotacachi clearly depicts deliberation when addressing public concerns (e.g. the topics covered in the discussion tables). The trajectory of the AUCC also matches the three criteria expressed by Healey (2006: 69-71) about creating social capital and common sense, having policies that better reflect the local context, and including a wide range of stakeholders. However, there could be the case where including a broad range of stakeholders may result into conflicts due to differences of interests. This fact is actually seen as an opportunity by Leonardo Alvear, reflecting his “political maturity” saying “[…] therefore I tell you, the opposing voices are very important, they must be heard so they broaden our points of view”. Bringing all the stakeholders together for deliberation has its benefits on creating common sense and awareness of the others’ problems. Echoing this statement, Francisco Grijalva states: “[…] that is the rich part of the citizen participation, what you and me are doing right now […] we are talking, so you get to know what are my concerns and also I get to know what you are doing […]”96. It is interesting how the testimonies of “ordinary people” who are probably not aware of the details of such philosophical and sociology theories, unconsciously match them based on their experience and what is also in the discourses of people.

Looking at the Cotacachi participatory process experience, and acknowledging the available national legislation on citizen participation, the first institutional design feature (devolution) can be discussed. Hence, it is clear that there is an attempt to devolve the power to the civil society through participation mechanisms like the empty chair, the planning cantonal council, the participatory budget, and the observatories. These participation mechanisms have been used (and still are) by the AUCC members (usually the president) in several times. These legally recognized spaces of participation match with some considerations raised by Healey (1993, in Allmendinger, 2009) when explaining the forging of planning systems and processes with a participatory approach. She addresses the need of formal spaces for deliberation to take place with two basic characteristics. First, these formal spaces should ensure an equal and just discussion, which means the accessibility of the language used and talks non-dominated by experts or power holders. Second, these formal spaces should count on an organized way to address each of the discussion points. Nevertheless, having such legally established spaces for participation may not reflect a full acceptance or conformity from those whom have always been involved in participation as the testimonies shown in the results chapter (section 4.2.2.4). In the same vein, Cornwall (2008a) is critical towards the trend that has pushed the de-legitimization of popular forms of participation once used for stand against inequality and injustice (e.g. demonstrations, strikes and petitions). Such de-legitimization trend made room for what she calls a “participatory sphere” (Cornwall and Cohelho, 2006, in Cornwall, 2008a: 282), which is the creation of institutionalized mechanisms for consultation. This is clearly reflected in the Citizen Participation Law (República del Ecuador, 2010b) and supported by the perception of the (ex) AUCC members regarding the (lack of) legitimacy of such participatory spaces (e.g. empty chair,

96 Interview with Francisco Grijalva, official within the Environmental Department of the Municipality, October 2014.
planning cantonal council and observatories). Cornwall (2008a: 282) concludes her publication stressing the need to “[...] enable those who take up those seats to exercise voice and influence, and help provide whatever support is needed [...] to popular participation that seeks to influence policy through advocacy rather than negotiation”. The word “enabling” here gathers the claims from the (ex) AUCC people, who are currently working in coordination with the Municipality for the strengthening of the participatory process. These claims of the (ex) AUCC people have to do with improving the legitimacy on the formal spaces of participation (e.g. empty chair, the planning cantonal council, the participatory budget, and the observatories). The devolution of power regarding the SWM issue is addressed in the next section, where the typologies of participation are used to describe the levels of (power) participation that the citizens perform.

To have a centralized supervision and coordination is what Fung and Wright (2003) state as the second institutional design feature, where the concept of autonomy is contested by the people in Cotacachi. The theory of Fung and Wright (2003) argues that autonomy should not prevail due to accountability issues. In contrast, the people from the AUCC pursue autonomy because they do not want to be an extension of the local government. The AUCC people do not want to have any compromise at the moment of supporting or standing against a decision, they claim. The Citizen Participation Organic Law (República del Ecuador, 2010b: art. 4) defines autonomy as the “political independence and auto-determination of the citizens and social organizations for participate in public interest issues”. According to this definition, the law better matches with the position of the AUCC people rather than the description provided by Fung and Wright (2003). Nonetheless, in article 61 of the same law, the word “procure” is used when addressing the presence of the local authorities in the “local assemblies”. This fact is not an option for the current municipal officials and AUCC militants; they do not want any elected authority within the CPP. Their claim clearly responds to their experience throughout almost 20 years, for instance, try to avoid the “parent-child” relationship between the Municipality and the AUCC. Critical to Fung and Wright’s (2003) understanding of autonomy, Schönleitner (2006) and Cornwall (2008b) talk about a threat for participatory processes: authorities allocating people from the political party on boards or civil councils. To prevent this threat, the people in Cotacachi operationalize the term autonomy by not allowing authorities within the CPP. According to Ospina97, the AUCC has demonstrated autonomy before, but nowadays the autonomy can be hampered by the too-close relationship between the Municipality and the AUCC. This issue draws attention on whether the AUCC would really maintain the autonomy from the current municipal administration (2014-2019).

The dichotomy of whether the AUCC will manage to step aside from the current administration or will develop a close (dependency) relationship brings us to discuss the third institutional design feature from the EPG theory: state-centered, not voluntaristic. This EPG principle states that participatory processes are meant to colonize (state) power in order to reform rules that would enhance participation. Since the current mayor and a big proportion of the municipal staff used to collaborate directly with the participatory process, the AUCC lost many advisors who were known as the “technicians”. This situation gives place to two possible outcomes. Firstly, and already discussed, this could threaten the AUCC’s autonomy in terms of dependence from the Municipality. Secondly, the fact of forming a political movement on behalf of the participatory process and having won the elections, could be seen as colonization of state power. However, these “democratic moments [...] campaign-based social movements, and electoral competitions in ordinary politics [...]” do not fit within this institutional design feature of the EPG (Fung and Wright, 2003: 23). This is the breaking point where theory is contested by the practice and vice versa. In Cotacachi, the colonization of power is taking place by “ordinary politics”. Schönleitner (2006: 35) states “participatory democracy presupposes a well-functioning representative

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97 Interview with Pablo Ospina, researcher from the Universidad Andina Simón Bolívar, December 2014.
democracy rather than curing its ills”. This quote advocates the approach of the political movement Vivir Bien – Ally Kawsay now administrating the Municipality of Cotacachi. However, it is too soon to draw conclusions on whether the AUCC will remain autonomous and whether the “ordinary politics” are the way of colonizing power. The current political party will be still on office until 2019; hence, it is worthwhile to describe (e.g. by a research project) the denouement of this struggle of keeping autonomy and colonizing power.

The momentum of the new born political movement raised critics from the opposing political movement AP-35, being openly exposed by the representative of the UNORCAC in a CPP meeting. She claims that the AUCC has too strong links with the Vivir Bien – Ali Kawsay movement, labeling the AUCC as a “totally partidized” organism and highlighting the fact that the autonomy is threatened in this way. I find this critic quite enriching for the participatory process itself because even though the municipal officials and the AUCC interviewees deny such partidization, the opinion of one person who pretty much represents the entire Andean Zone is strong enough to raise awareness among the stakeholders and avoid the partidization to occur.

The last EPG feature has to do with the enabling conditions and mainly the equity of power within the participatory process. Alicia Guaján, the representative of the UNORCAC in the AUCC raised an important issue regarding a lack of equity during the discussions due to the language barriers. On support to that claim, Foucault asserts that power relations can be hidden behind the language embodying knowledge within the discourses (1970, in Hall and Gieben, 1992). As quoted in the section 4.2.2.7, the indigenous people still have problems to communicate and understand technical knowledge. These drawbacks position them in a disadvantaged situation compared to the rest of the participants or whoever wants to convince them that A or B project are the best solution for their community. Even though the EPG theory does not mention the language issue, it is in fact an enabling condition (or barrier) for the existence of a just and equity-based participatory process.

The last three EPG features did not address the SWM issue because they were more focused on interpreting the current tensions and claims under discussion within the participatory process. However, it is worth to mention that attaining autonomy, colonizing state power and paying attention to enabling conditions comprise (positive) impacts on envisioning a transition of the current SWM regime. In other words, the AUCC has a high potential to influence the transition towards an inclusive SWM.

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5.1.2. LEVELS OF PARTICIPATION PERFORMED BY THE AUCC AND SWM STAKEHOLDERS

“Sharing through participation does not necessarily mean sharing in power” (White, 1996: 6).

By stating this, Sarah White highlights an important issue when participation is brought into practice: the share of power. Also addressed by Sherry Arnstein (1969), the extent to which the decision-making power is devolved to the civil society is worth to analyze in real cases of participation. Therefore, here the participatory process of Cotacachi, as well as the role of the citizens in the SWM will be reflected with the typologies of participation.

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98 Interview with Alicia Guaján, representative of the UNORCAC in the AUCC, November 2014.
Looking at the almost 20-year trajectory of the participatory process of Cotacachi, using one category to describe it would limit its scope and undermine its achievements. Thereby, according to the Arnstein’s ladder of participation, the citizen’s performance matches the *placation*, *partnership* and even *delegated power* rungs. It can be placation when the municipal council rejects the AUCC annual assembly resolutions, looking at them as documents to consult. It can also be placation when citizens take part of the planning cantonal council or the empty chair, and, where even though they have a vote, their minority status convert them into agents of consultation, although holding a potential influence in the decisions. The citizens play a role of partnership when the participatory budget is undertaken. Considering that each rural parish has a certain amount of budget, is according to what the inhabitants prioritize how the money will be spent. The financial support given by the Municipality for the realization of the XIX annual assembly of the AUCC also shows the political willingness of the current administration to treat the AUCC and the work they do as partners. One case of delegated power was that the Health Working Group of the AUCC managed to decentralize the administration of the health system of the canton in the time when Auki Tituña was the mayor (Municipio de Santa Ana de Cotacachi, 2008). However, a change in the laws at a national level determined that the health issues is a competence of the central government and the administration was taken back to the central government health system. Another example of delegated power performed by the AUCC is to impart environmental education to high school students. Education is a central government competence, but since 2008, the Imbabura Provincial Subdivision of Education allowed the AUCC to run an environmental education program in Cotacachi, which is still functioning until now with approximately 70 students from the canton. This means that the environmental issues, in this case education and rising awareness, have been discussed within the AUCC deliberative spaces before, thus not being only dominated by the mining issue in the Intag Zone as some of the interviewees addressed.

A different approach or typology to assess participation is the one proposed by Jules Pretty (1995) who describes it based on the citizens’ performance rather than the power delivered by the authority. Therefore, the AUCC fits precisely within the *interactive participation*, where “people participate in joint analysis, development of action plans and formation or strengthening of local institutions” (Pretty, 1995: 1252). The discussion tables’ methodology are a good example of the description just quoted because municipal officials also take part of them, so the resolutions comprise a joint (authorities-citizens) analysis. This could be compared, yet not confused with the second institutional design feature form the EPG theory that addresses a centralized supervision. Hence, despite the fact that the current administration is eager on promoting participation, the concept of autonomy is present in the discourses of both the Municipality officials and the AUCC actors. The participatory budget can be also labeled as interactive participation since the “[...] groups take control over decisions and determine how available resources are used [...]” (Pretty, 1995: 1252). However, a follow-up task regarding the participatory budget is to keep track and demand accountability. As Mustalalhti and Rakotonarivo (2014: 207) suggest, horizontal accountability should be downscaled, empowering “disadvantaged groups” in order to achieve greater transparency. Contextualizing the Cotacachi case study, the accountability should be claimed and managed by the AUCC, yet downscaled to the community and neighborhood levels, so the beneficiaries are actually at the stage of instrumental participation.

Sara White (1996) provides a typology based on the interests of the stakeholders; therefore, the participation in Cotacachi can be labeled as *transformative*. This means that the people form the AUCC and Municipality see empowerment as a mean and an end, where people acquires greater consciousness of the surrounding problems and attain a higher efficiency to address them. This

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99 Interview with Christian Paz, from Oxfam, October 2014.
100 Interview with Hugo Robalino, President of the AUCC, September 2014.
also matches with one of the criteria provided by Healey (2006) who states that these deliberative exercise create social capital and common sense.

Many more examples can be provided in order to underpin one or another label that would better describe the participatory process of Cotacachi. However, I am aware that such characterization can be influenced by many factors such as personal interests, a lack of sources of information, cultural differences, and social bonds that influence the positionality of the researcher when conducting the field inquiry (section 3.6). Even though the examples provided shows that the citizens perform high levels of participation, I think that their opinions should have a significant weight. Despite the Municipality is strengthening the participatory culture among the inhabitants of Cotacachi, the people from the AUCC still claim for performing higher levels of power in the decision-making process. This may respond to a fact addressed by Arnstein (1969) who says that citizens with experience in participation are not easy convinced to perform low levels of participation. In other words, the participatory process itself has shaped a “participation culture” among the citizens of Cotacachi, raising their awareness of the potential they have to influence the local decision-making. Nevertheless, this awareness is not reflected when the citizens participate of the SWM of the Cotacachi canton. As mentioned in the results chapter (section 4.3.1) the majority of inhabitants (or households) take part of the formal municipal SWM regime. Thereby, the inhabitants’ participation in the formal SWM can be also analyzed according to the participation typologies.

According to the Municipality officials “the best way of managing the solid waste” consists on citizens’ education for source organic/inorganic waste separation, recover as much recyclable waste in the final disposition facilities and then a well-managed landfill. Under the municipal officials’ understanding, the role of the citizens within the solid waste chain is to respect the organic/inorganic collection days previously socialized. This fact is limited to an educational level, which according to the ladder of participation of Arnstein (1969) it corresponds to a very low level of participation, the manipulation rung. However, the aim is not to label as a wrong approach of implementing SWM. Actually, when asked about education and raising awareness for SWM purposes, every single interviewee pointed out that it is a crucial component to create consciousness among the inhabitants. This perception is confirmed by Akil and Ho (2014: 5), who conducted a research at Iskandar Malaysia with the aim to assess the readiness of the community to accept a solid waste recycling program. They recommend that the “[...] government should provide more in-depth knowledge by intensifying the awareness of households in the recycling program”. Additionally, van Buuren et al. (2014) affirm that source separation (e.g. households) facilitates the recovery and processing of recyclable waste. According to Jacinto Guerra, the person in charge of the solid waste collection system of the Municipality, approximately 90% of the households do a correct organic/inorganic waste separation; he adduces such success to a door-to-door socialization campaign executed during the previous administration. Maybe the label of manipulation from the ladder of participation of Arnstein (1969) does not properly describe the attitude and expectations that the Municipality has regarding the citizens behavior. Hence, Jules Pretty’s label of passive participation more accurately describes this situation: the citizens are told what to do according to what it has been already decided, basing this decision on experts or professionals’ inputs (Pretty, 1995). White’s typology also labels this as instrumental participation since it represents citizens’ time and resources costs whereas for the authorities it means to attain effectiveness in the implementation of the measure.

When analyzing the levels of participation of the BUP, the outcomes depicted totally the opposite situation described by the households’ participation within the formal SWM system. The fact that the BUP have total freedom to decide what to do with the waste they handle, yet considered

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101 Interviews with: Dany Andrade, Jacinto Guerra and Francisco Grijalva, Director and officials respectively from the Environmental Department of the Municipality, October 2014
informal, they would be performing the citizen control level of participation according to Arnstein’s typology. Nevertheless, such labeling does not apply to the BUP since the power to take decisions over the solid waste has not been transferred from the competent authorities. Whereas looking at Jules Pretty’s typology, the BUP better matches the self-mobilization, “[…] where people take the initiative independently of the external organizations, developing contacts for resources and technical assistance, but retaining control over the resources” (Pretty, 1995: 1252). There is no doubt that the BUP have the control over the waste they deal with, but their informal status hampers the improvement of their situation as they expressed. Under the eyes of the municipal officials, as long as the BUP are not registered with the Ministry of Environment of Ecuador to accomplish such activities, they are seen as informal and even illegal. I acknowledge here my willingness to push towards this transition to happen, which responds to one of the issues addressed in the positionality section (3.6) of the methodology chapter. However, I also recognize that sustainable transitions are needed to improve the social and environmental situations in developing countries, thus, presenting in the next section the elements and arguments that could potentially lead towards such transition.

5.2. COTACACHI’S POTENTIAL SUSTAINABLE TRANSITION

In the previous section, certain points of the EPG theory were reflected on the participatory process of Cotacachi. Besides discussing whether the AUCC matches or not with the seven features of the EPG, the prominence of this participatory space was highlighted. Additionally, the levels at which the power has been devolved to civil society from the participatory process were discussed, as well as the levels at which the SWM participants perform some degree of power. Throughout this section, the discussion elaborates around the links between the participatory process of Cotacachi, the cantonal SWM, and the potential sustainable transition towards an inclusive SWM.

The interplay of the three levels (regime, niche and landscape) from the Multi-level Perspective (MLP) displays how a sustainable transition could take place (Figure 1). Each of the three levels have been contextualized to the Cotacachi case study in the results chapter (section 4.3). Therefore, it can be said that the current SWM regime is dominated by the service provided by the Municipality. The SWM regime in Cotacachi entails the citizens’ collaboration in terms of organic/inorganic source separation. After being collected, the waste is taken to the final disposition places: the organic waste goes to a farm, and the inorganic waste goes to the recovery facilities and landfill. These practices are endorsed by the Ecuadorian legislation which ensures that the SWM is a municipal competence (República del Ecuador, 2010a). Moreover, the degrees of participation that the citizens perform in the SWM regard match with the lower levels from the participation typologies (Arnstein 1969; Pretty, 1995; White, 1996). This fact is acknowledged by the municipal officials whom assert that this is how it should be.

However, different practices are occurring outside the aforementioned regime; these are the activities performed by the BUP and comprise the niche level. To shortly recap the findings upon the BUP’s activities, there were four kind. (1) The informal inorganic recyclable waste collectors who sell the waste to get a profit. (2) The informal organic waste collectors who use the waste to feed their animals. (3) The initiatives aligned to educational and recreational matters. (4) And the citizens who deal with their own organic waste for their orchards. These BUP are performing high levels of participation in terms of deciding what to do with their waste. Furthermore, these people are conforming networks that allow them to trade recyclable waste and make a livelihood out of
it. Nonetheless, the municipal officials in charge of the SWM of Cotacachi disapprove their activities claiming on lack of associativity, health risk, and illegality.

These two levels (niche and regime) are influenced by the elements that conform the landscape level in the Cotacachi case. To recap, the four elements are: (1) a national and international trend on inclusive SWM; (2) informal waste picking as a livelihood opportunity; (3) a national SWM policy that advocates for inclusion of the informal collectors; and (4) the ideology of the current political movement on office, keen on fostering participatory decision and policy-making. Regarding the effects on the niche level, the existence of a market for recyclable inorganic waste is something that the Municipality cannot influence, and for instance, to change. This already existent solid waste market encourages the BUPs at the niche level to continue with their activity. Thus, the livelihood opportunities that collecting and selling recyclable solid waste is attracting more and more people from both the urban and rural areas of Cotacachi. Concerning the influence over the regime level, the Ecuadorian solid waste policies (PNGIDS) encourage the inclusion of informal collectors to the municipal SWM systems (Ministerio de Ambiente del Ecuador, 2012). Furthermore, the current political movement (Vivir Bien – Ally Kawsay) on office is eager on promoting participation the Cotacachi canton. This two factors directly exert pressure over the current SWM regime, and especially over the municipal officials who are in charge and take the decisions over the SWM of Cotacachi. Additionally, a worldwide trend of solid waste recycling and informal collectors’ inclusion in the solid waste governance influence the local authorities (Adama, 2012; Paul et al., 2012; Velis et al., 2012; van Buuren et al., 2014).

According to the MLP description of a sustainable transition, a destabilization of the current (SWM) regime is needed in order to incorporate the (BUP’s) innovations from the niche level. Such destabilization is caused by the influence of the elements from the landscape level. The Figure 7 aims to show this process; it presents the elements on each level, the interplay among levels, details on the window of opportunity (gray square), and an inclusive SWM as the final outcome. The Figure 7 has the same structure of Figure 1, used by Geels (2011: 28) to graphically explain how a sustainable transition takes place. The difference is that Figure 7 includes the findings of the Cotacachi case on each part of the graph.

**FIGURE 7. MULTI-LEVEL PERSPECTIVE IN THE COTACACHI SWM CONTEXT**

(ADAPTED FROM GEELS, 2011: 28)
The window of opportunity is the crossroads where the participatory process and the idea of the sustainable transition encounter, addressing in this way the answer to the seventh sub-research question: what are the challenges and opportunities of including the solid waste BUP into the participatory process of Cotacachi? As aforementioned, the elements at the landscape level enable this window of opportunity to open. Hence, the insertion of the innovations of the niche level can be fostered by using the concepts from the Strategic Niche Management (SNM) which includes setting up expectations, building up the social networks, and acknowledging a multidimensional learning process (Schot and Geels, 2008; Geels, 2011). The SNM was developed for addressing and modifying policies that hinder innovative technologies (Schot and Geels, 2008), yet it is not clear who should steer that process. This was a subject of critics towards the MLP from various scholars whom claimed the lack of agency. Nevertheless, the recommendation here is that the AUCC should take the lead, harnessing in this way the participatory momentum that Cotacachi is going through. Due to the experience, prominence, and autonomy that the AUCC has demonstrated, it might be the right institution to contribute in balancing the decision-making power within the SWM regard, now dominated by the Municipality. In this vein, the AUCC would operationalize the elements from the landscape level that would give place to open the window of opportunity (Figure 7). This can be summarized on:

- Following their participatory approach, the AUCC should set expectations and visions that would point to an inclusive SWM regime.
- Acknowledge the existence of BUP throughout the Cotacachi canton, which is a contribution of this study.
- Create the social networks needed to boost-up the destabilization of the current SWM regime. That includes connecting external agencies that have experience on solid waste informal sector inclusion (e.g. AVINA Ecuador and RENAREC).
- Contact and invite the BUP to conform an association and join the CPP so a new discussion table can be created where the SWM issue can be deliberated.
- Spread the political ideology (participatory governance) carried by the current municipal authorities to the Department of Environment of the Municipality officials.

Other authors contribute with more recommendations that support the aforementioned points. For example, Paul et al. (2012) end their publication with a long list of recommendations that include mapping of stakeholders, promote the association of informal collectors, capacity building programs on health, hygiene, safety and, entrepreneurship for informal collectors, among others. Adama (2012) suggest inviting informal collectors to early stages of solid waste issues planning. Velis et al. (2012) and their analytical tool address four basic interfaces to consider: the first one between the informal recycling sector and the SWM system, the second one between the materials and the value chain, the third one the society as a whole, and the last one about organizational and empowerment issues. These recommendations represent also research opportunities with a quantitative approach. For example, the amount of waste (organic and inorganic) generated at a household level, the amount of waste recovered by informal collectors, the spatial distribution of the informal collectors within the city, and so forth.

In spite of the promising panorama for including the BUP to the participatory process, there are some challenges that need to be considered as well. Cornwall (2008a) asserts that the fact of creating spaces of participation does not ensure an effective participation; it much depends on

102 Geels’ (2011) paper elaborates around criticisms that other scholars have raised towards the MLP; the lack of agency criticisms was mainly pointed by Smith et al. (2005) and Genus and Coles (2008), both cited in Geels (2011).
103 With the “destabilization of the current SWM regime” I do not mean that the innovations should replace the current municipal practices. Schot and Geels (2008: 547) mention that “niche innovations [...] can only diffuse more widely if they link up with ongoing processes at regime and landscape levels”.


the interest and willingness the people have (White, 1996). Also, there is a risk raised by Schönleitner (2006: 42) who says that the inclusion of the “poorest” by the “public powers” can hinder the autonomy of the included ones. Moreover, Cornwall (2008a) suggests to pay attention to spaces of participation that people have created already in order to avoid the disruption of existing networks. Hence, for the Cotacachi case, it is recommended to consider the existing relations between primary and intermediary inorganic waste collectors, as well as the existing arrangements between organic waste collectors and households. However, an important shortcoming that could hamper the inclusion of the organic waste collectors to the current SWM regime was found during the field inquiry. These BUP are reluctant to associate, a common issue among the informal collectors as the president104 of RENAREC mentioned, and confirmed by Sasaki and Araki (2014).

Nevertheless, there is a significant opportunity: the inorganic waste collectors and the BUP involved in educational and recreational activities are open to cooperate with the Municipality or any institution that proposes a project related to include them to the SWM regime. Due to the complexity of the participatory decision-making process in the SWM regard, Petts (2004: 129) suggests to count on a “[…] decision-support framework in which multiple methods are integrated to allow for multicriteria decision-making with full participation”. This suggests to have debating spaces that include the wide range of SWM stakeholders rather than only-experts discussion. In this way, the municipal officials from Cotacachi would get to know the needs and claims of those (BUP) who are actually helping with the cantonal SWM. Moreover, the BUP will acknowledge national and local legislation, risks at which they are exposed, and budget and infrastructural limitations of the local government. Such “decision-support framework” can be provided and facilitated by organizations that have experience bridging the gap between the local authorities and informal collectors. These organizations are AVINA Ecuador (international NGO) and RENAREC (National Network of Recyclers of Ecuador) which actually shown high interest on the outcomes of this study so they can provide support. Even though my position as a researcher should remain impartial towards the (wanted) sustainable transition from the current top-down SWM regime to a more inclusionary one, I have to express that the participatory culture embedded in the inhabitants of Cotacachi provides enough ground and potential to move forward to such transition. However, as in any other research, it is open to receive critiques and different points of view that for sure will enrich the available knowledge about the participatory process and the SWM of the Cotacachi canton.

As a final remark, it is worthwhile to raise some points regarding the spatial issues that the current (and possible future inclusive) SWM of Cotacachi depicts. These issues can be seen as starting points for developing future research projects. One of them is the territoriality described by the informal collectors dedicated to select organic waste for their animals. By mapping the area covered by these BUP and quantifying the amount of waste they collect, useful information can be gathered: spatial distribution of the activity, organic waste flows, social networks in the solid waste regard, etc. A second issue to be analyzed is the implications of promoting an inclusive SWM for the transport of the waste within the territory, and the final disposition of the waste. Transporting waste from one place to another represents a cost for the local administration; furthermore, increasing generation of waste means to build additional landfills. Therefore, it would be interesting to explore the implications of the new variable “more waste recovered” for the land use plans throughout the canton. Whatever the direction of future research is, this thesis contributed with qualitative evidence on the current situation of the cantonal SWM and insights on how the decision-making process works in Cotacachi.

104 Interview with Laura Guanoluisa, president of the National Network of Recyclers of Ecuador (RENAREC), November 2014
6. CONCLUSIONS AND RECOMMENDATIONS

There is no doubt that since its creation, the AUCC has shaped a participatory culture among the citizens of the organized civil society within the Cotacachi canton. The engagement of the public for the initiation of such participatory process back in 1996 was harnessed by the common feeling of mistrust towards the representative democracy. Nowadays, after 19 years, the participatory process embodied by the AUCC is experiencing a momentum fostered by the current municipal administration integrated by people who once were in the side of the civil society. Throughout almost these two decades, the ordinary people has attained a political maturity, social capital, and common sense that have allowed them perform high levels of decision-making power in specific cases like health and educational matters. The Draft of Ordinance which contemplates to give a legal and institutional ground to the system of participation of Cotacachi, gathers the historical claims and reforms that the participatory process has experienced since its creation. Such Draft of Ordinance addresses the perceived and requested principle of autonomy, the structure of representatives, and spaces of deliberation, attempting to ensure equity of power between the participants and the local authorities. Even though the stakeholders still claim for higher levels of decision-making power, a process of colonization of (state) power has been described. This way of colonization of (state) power is evidenced by the fact that the current political movement on office was born in the AUCC in response to the lack of attention given by the municipal previous administration (2009-2014). Although it is only the beginning of the municipal administration (2014-2019), this fact is contesting the Empower Participatory Governance (EPG) which says that democratic processes and electoral competitions are not the way of colonizing (state) power in order to create reforms that enhance the public participation. However, the day that such Draft of Ordinance is approved, a step forward is being taken. It is suitable to follow closely the performance of the current municipal administration and the position that adopts the AUCC in order to assess whether the system of participation is implemented according to the expectation of the civil society. Furthermore, the autonomy of the AUCC and its label of a partidized organism is also an issue worthy to keep track.

The political maturity, social capital, and common sense embedded in the people who is active in the participatory process of Cotacachi, have a significant potential to foster what the Multi-level Perspective (MLP) labels as sustainable transition. The three levels (regime, niche and landscape) of the MLP can be distinguished in the Cotacachi SWM, as well as the interplay among the levels, and the window of opportunity that could lead to the sustainable transition (Figure 7). The regime level (or formal SWM) is performed by the Municipality; it depicts top-down, large-scale, and pursues high-tech solutions to tackle the solid waste problem of the canton. The niche level (or informal SWM) is performed by the bottom-up practitioners (BUP); they describe a more small-scale low-tech approach, and even build social relations among the inhabitants. The following activities from the BUP were evidenced: (1) the collection of inorganic recyclable waste as a livelihood; (2) the collection of organic waste for feeding animals (e.g. pigs and guinea pigs); (3) the use of waste for educational and recreational purposes; and (4) the use of the own household organic waste for orchards. The municipal officials in charge of the SWM of Cotacachi do not approve the existence of the BUP’s activities (1 and 2) due to their illegal status. According to the municipal officials in charge of the SWM, these BUP should be registered with the Ministry of Environment to accomplish such activities. This reluctance at the regime level is precisely what is under the pressure and influence of the landscape level. The landscape level comprises (1) the worldwide trend of an inclusive SWM, (2) the informal waste collection as a livelihood, (3) a national policy that endorses the inclusion of informal collectors, and (4) the participatory democracy ideology of the current political movement on office. It is recommended that the AUCC should take the lead in order to “open the window of opportunity” that would give place
to envision a transition towards an inclusive SWM. Many factors could favor this transition to happen. The municipal officials recognize that thanks to the BUP labor, less waste reaches the landfill and that the door of cooperation is opened as long as they see an organized informal sector. Moreover, the panorama of including the BUP to the current SWM looks promising due to the willingness of an external NGO (AVINA Ecuador) and a national association of recyclers (RENAREC) to cooperate and support such inclusion process. From the side of the BUP dedicated to sell and trade recyclable waste, and BUP involved in educational activities, there is also disposition to work together if the chance is offered. In contrast, the individualist and jealous attitude expressed by the organic waste collectors could hamper their inclusion to the municipal SWM. Nevertheless, it seems that many stakeholders are walking on the same path. In this vein, Felipe Toledo\textsuperscript{105} uses the word \textit{articulation} to make this transition possible; this means to have the space where authorities and citizens get to know each other, express their claims, requests, and limitations, in order to build up a trust relation among them. The participatory process of Cotacachi, through the experience of AUCC, has the potential to foster the transition towards a more inclusive solid waste management.

\textsuperscript{105} Interview with Felipe Toledo, from AVINA Ecuador, October 2014.
7. REFERENCES


ANNEX 1. LIST OF INTERVIEWEES (SEPTEMBER-DECEMBER 2014)

The information goes like this: name, position or activity, place of interview, date.

**People from the AUCC (Cantonal Unity Assembly of Cotacachi)**

1. Leonardo Alvear, ex-president of the AUCC in two terms, Cotacachi, 29-Sep-2014
2. Hugo Robalino, official within the AUCC, Cotacachi, 30-Sep-2014
3. Alfonso Morales, president of UNRAC, Cotacachi, 04-Nov-2014
4. Alicia Guaján, representative of UNORCAC in the AUCC, Cotacachi, 10-Nov-2014
5. Auki Tituaña, three times mayor of Cotacachi and creator of the AUCC, Cotacachi, 16-Dec-2014

**People from the Municipality**

1. Jacinto Guerra, official within the Environmental Department of the Municipality in charge of the solid waste collection system, Cotacachi, 01-Oct-2014
2. Francisco Grijalva, official within the Environmental Department of the Municipality in charge of the final disposition of the solid waste, Cotacachi, 01-Oct-2014
3. Ana Cristina Flores, Director of the Citizen Participation Department of the Municipality, Cotacachi, 14-Oct-2014
4. Dany Andrade, Director of the Environmental Department of the Municipality, Cotacachi, 21-Oct-2014
6. Luis Baldeón, Director of the Financial Department, Cotacachi, 10-Nov-2014
7. José Cueva, Director of the Planning Department, Cotacachi, 11-Nov-2014
8. Jomar Cevallos, mayor of Cotacachi, Cotacachi, 16-Dec-2014

**Solid waste bottom-up practitioners (BUP)**

1. Virginia Monroy, primary (inorganic) waste collector, Cotacachi, 16-Oct-2014
2. Sebastián Alvear, co-creator of the plastic bottle bins project, Cotacachi, 16-Oct-2014
3. Wilson Jaramillo, primary (inorganic) waste collector, Cotacachi, 21-Oct-2014
4. Jaime Cazar, Director of the “6 de Julio” School, Cotacachi, 04-Nov-2014
5. Luis Alberto Yamberla, English teacher in charge of the plastic bottles collection project of the “Luis Ulpiano de Latorre” High School, Cotacachi, 04-Nov-2014
6. Luis Alberto Farinango, intermediary inorganic waste collector, Imantag, 17-Nov-2014
7. Yadira Cajas, president of the youth group Wambra Wasi, Imantag, 17-Nov-2014
8. Laureano Coral, primary (inorganic) waste collector, Cotacachi, 18-Nov-2014
9. Alba León, plastic bottles collector for handcraft and toys making, Apuela, 16-Dec-2014
10. Visitation Order Nun**, selling of plastic bottles initiative for communal house roof repairing, Apuela, 16-Dec-2014
11. Amilcar*, primary (inorganic) waste collector, Peñaherrera, 16-Dec-2014
12. Sports teacher*, composting project coordinator teacher from the “José Peralta” Agricultural High School, Peñaherrera, 17-Dec-2014
13. Five* other people were fund in the Urban Zone of Cotacachi, Peñaherrera village and Pucará community collecting inorganic waste for selling.
14. Seven* other people were found in the Urban Zone of Cotacachi collecting the organic solid waste for their pigs and guinea pigs.

**NGOs, Communitarian Leaders, Parish Presidents and Academic**

1. Felipe Toledo, program coordinator II of AVINA Ecuador, Quito, 03-Oct-2014
3. President* of the Santa Rosa community located in the Plaza Gutiérrez rural parish, La Calera community, 18-Oct-2014
4. José Gordón, President of the San José de Magdalena Community located in the García Moreno rural parish, La Calera community, 19-Oct-2014
6. Laura Guanoluisa, president of the National Network of Recyclers of Ecuador (RENAREC), Quito, 15-Nov-2014
7. José Garzón, President of the Cuellaje rural parish, Cuellaje, 16-Dec-2014
8. Pedro*, Cuellaje village solid waste collector hired by the parish administration, Cuellaje, 16-Dec-2014
9. Pablo Ospina, professor at the Universidad Andina Simón Bolívar, Quito, 18-Dec-2014

*Full names not registered.
**Anonymousness requested.
ILLUSTRATION 1. STREET DOG SPREADING OUT THE SOLID WASTE IN SEARCH OF FOOD

ILLUSTRATION 2. ORGANIC WASTE COLLECTED BY THE TRUCKS AND BEING DUMPED IN THE FARM
ILLUSTRATION 3. RECYCLABLE WASTE RECOVERY SECTION WITHIN THE FINAL DISPOSITION FACILITIES

ILLUSTRATION 4. LANDFILL LOCATED IN THE FINAL DISPOSITION FACILITIES
ILLUSTRATION 5. FINAL DISPOSITION FACILITIES IN THE CUELLAJE RURAL PARISH

ILLUSTRATION 6. CLIFF DUMPING SITE IN APUELA RURAL PARISH
ILLUSTRATION 7. PRIMARY (ORGANIC) WASTE COLLECTOR IN THE COTACACHI URBAN ZONE

ILLUSTRATION 8. TRASH BAG HANGING IN THE HOUSE GATE TO AVOID STREET DOGS TO OPEN IT WHILE THE TRUCK PICKS IT UP
ANNEX 3. BASIC LIST OF QUESTIONS USED IN THE INTERVIEWS

The questions where slightly adjusted to the type of interviewee according to the position, context and activity that he/she does. This is the basic list of question used when conducting the open-ended interviews.

Questions asked to people from the AUCC and Municipality

- What do you understand for participation?
- How does the participation work here in Cotacachi?
- Have you identified manipulation acts within the participatory process?
- At what level has the power been devolved to the civil society?
- Is there a hierarchy between the AUCC and the different levels of government (Provincial, municipal, parish)?
- Is the AUCC and the Municipality at the same level of power to take decisions?
- Has the AUCC power to take decisions?
- Does the AUCC address the solid waste management issue?
- What is the best way of managing the solid waste?
- How are the decision upon solid waste management taken?
- Who take the decisions upon the solid waste management?
- What are the (technical) problems that Cotacachi has in the SWM regard?

[AAfter having collected information about the bottom-up practitioners (BUP)]

- Did you know about the existence of the activities that BUP perform?
- Do you consider them as potential solutions to the current solid waste management problems?
- Should these practices be supported and fostered?
- Can these activities be integrated to the current solid waste management?

Questions asked to the bottom-up practitioners (BUP)

- Can you explain me what (and why) do you do with the solid waste? **
- What factors hamper/enhanced your activity? **
- Can you explain me what do you do with the solid waste you are collecting? *
- Would you like to increase your capacity of solid waste collection? *
- What are the factors that stop you to do it so? *
- Do you think your activity support the municipal solid waste management? ***
- Has the Municipality impeded/supported your activity? ***
- Would you like to cooperate with the Municipality/AUCC solid waste management programs? ***
- Would you like to associate with other BUP? *

* Questions asked to the organic/inorganic waste collectors
** Questions asked to the BUP related to educational and recreational activities
*** Questions asked to all the BUP