Conflict between the Industrial Company for Phosphoric Acid and Fertilizers (SIAPE, Sfax) and the civil society: A problem of Development or a developmental problem?

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الملخص باللّغة العربيّة:

يسعى هذا البحث إلى تقديم مُعالجة سوسيولوجيّة للأزمة الإيكولوجيّة التي يسبّبها المجمّع الكيميائي التّونسي بصفاقس " -شُهِرَ السّياب' - والحركات الاجتماعيّة التي انبثقت عنه من قبل المجتمع المدني. وفي هذا السّياق سنسعى إلى الوقوف عند دَوْر الحراك المدني، في البحث عن حلول للتّردّي البيئي للمدينة، أهمّها المطالبة بغلق المُجمّع، باعتباره من المؤسّسات التّحويليّة المُلوِّئة لساحل "صفاقس" الجنوبي، ومدى إسهامها في التّوعية بالخطورة البيئيّة التي تشهدها الجهة.

وانطلاقا من منهج كيفي، ومفهوم الحركة الاجتماعيّة لآلان توران سنُفسّر الظّاهرة الاجتماعيّة، بما هو اجتماعي. وبالتّالي سيكون هدفنا الرّئيسي، تثمين البحوث السّوسيولوجيّة، وضرورة انفتاحها نحو إشكاليّات تكون أكثر استجابة وتطابقا مع نقائص المجتمع وواقعه، ولاسيما المتعلّقة بالبيئة، حتّى لا تكون عائقا للتّنمية.

الكلمات المفتاحية: "السياب"، الحركة الاجتماعية، البيئة.

Abstract:

This study conducted a sociological investigation on the ecological crisis caused by the Company for Phosphoric Acid and Fertilizers belonging to the Tunisian Chemical Group and its ensuing social unrest of the civil society in Sfax. Applying Touraine's (2005) concept of social movements and adopting quantitative and qualitative approaches, this study attempted to explain the social phenomenon as a representation of social life. In addition, it assessed the role of the civil movement in the search for solutions to the environmental degradation in Sfax. The major finding of this work was that the relation between the company and the civil society reveals a problem of development and a developmental problem.

Keywords: « SIAPE », social movement, environment

1. Introduction:

The Tunisian Chemical Group (henceforth, GCT) has adopted a prevailing institutional production culture in its manufacturing unit, the 'Industrial Company for Phosphoric Acid and Fertilizers' (henceforth, SIAPE, Sfax). Since its inception, the main tenet of this production culture was that no one questions its social conditions or its environmental implications as long as the production is good, conform with international standards and competitive. As a consequence, Ben Fraj (2017: 347) argued that the GCT social responsibility was deficient because it failed to adopt the universally agreed standards and benchmarks related to the environmental problems and the ethics of the economy. Nevertheless, following the recent events of 14 January 2011, internal changes in the sociopolitical contexts imposed the necessity to adapt the institution operation structures to the international production standards. The most important aspect of this adjustment was the shift of the culture of this institution towards reconciliation with society (Ben Fraj, 2017: 326-330) and the development of a network of relations with it to achieve greater cohesion and a break with the forms of conflict that characterized their relationship.

This change did not affect only the institution culture, but also it touched the mentality of the members of the Sfaxian community. This was manifested in their new conception of the environment and the

need to defend it against pollution resulting mainly from industrialization. Hence, a social protest movement was created by the civil society as an expression of a desire to improve the environmental situation of the Sfaxian Southern coast and as a form of refusal of SIAPE, the main agent of its deterioration. To confirm Boudon's (2005) claim that the social movement is a "collective action aimed at establishing a new system of life", protest movements emerged from the civil society in Sfax where the "Coordination of Environment and Development" emerged as the main agent to reorganize and improve the environmental situation of Sfax. All this created a context of reconciliation and conflict between the community and SIAPE. Whereas the former required immediate change, the latter insisted on preserving the status quo despite the recommendation of the new constitution to guarantee the right to a healthy environment for all Tunisian citizens (Tunisian Constitution, 2014).

The problem was due to the opposition between the developmental social and economic roles of this factory on the one hand and its environmental pollution on the other. This partly explains why the successive governments promised to put an end to environmental problems in the city of Sfax but never kept its promises. The recent protests took the form of sit ins that lasted for more than a month in front of the headquarters of the governorate opposing the two parties: the pros and the cons of the movement.

The main purpose of this paper is to provide a sociological analysis of the conflict between SIAPE and the civil society. This will be investigated through the delineation of the position of the Sfaxian citizens vis-à-vis the company and the civil society movement. In addition, our focus will be on assessing the role of the Coordination of the social movement in the search for solutions to the deteriorating environmental conditions of Sfax. In particular, this study will shed light on the most important demand which is the shutdown of the production unit as one of the largest polluting industrial factories of the southern coast of the city.

Section two of this paper will begin by presenting the theoretical framework encompassing the problem of the social movement that has developed against SIAPE and review the literature related to the topic. Moreover, it will present the SIAPE since its foundation with a focus on its environmental reality, which triggered the civil protests. This section will also attempt to describe the two observed causes of social

protests; namely, the environmental claims, and the social ones. Section three will deal with the methodology adopted in this work and its formulated hypothesis. Section four will present the main findings of the empirical study and discuss them. Section five will consist of a conclusion and some recommendations.

2. Literature review

2.1. The theoretical framework of the study

The issue of environment before the events of 14 January 2011 was almost a taboo in the society. Abdelmouleh (2013: 17) argued that, at best, it was merely a "theoretical question, involving economic, political and ideological challenges". In contrast, after the events of 14 January 2011, this has completely changed. Indeed, social protests in Tunisia took many forms and spread all over the country. People openly protested against the increase of social and environmental problems and criticized the government for failing to solve them. In view of this controversy, the civil society in Sfax, driven by the spirit of struggle and the desire to change the deteriorating environmental situation of the city, rallied in social movements that hoped to establish a new, balanced and fit for human habitation environment. These movements are represented by the two following protests: "We have suffocated" [Tekhnekna] and "Enough" [Yezzi].

Since the social movements have become a universal expression of opposition over the years (Souraya, 2016: 344), these two movements can be considered a mechanism through which the Coordination members expressed their environmental aspirations as opposed to the state's inertia. Firstly, the state has played a passive role in improving the environment. Secondly, it failed to keep its promises. Indeed, on many occasions, it promised to shut down the "SIAPE" and put an end to the environmental pollution in the city, but it never did. Thus, this civil movement was considered a liberation from the mandatory state order to the individuals to accept the poor environmental situation resulting from industrialization as a forbidden subject. Hence, social protests are a liberation from the traditional school perceptions (Comte, 1998) and Durkheim, 1994) who studied social phenomena in isolation of the individuals' will and considered them as independent and binding. Indeed, whereas they consider the system and the institutions such as the family, the school and the state as clear proofs that they impose authority and subjugation of the social system on individuals, they totally agree with the "Sociology of Action" in

Touraine's (1965) study of social movements as a legitimate reaction to the oppression of these institutions. In the midst of the ecological crisis in the southern coast of Sfax, caused by the spread of industrialization and its untreated gaseous, liquid and solid wastes, dumped outside the factories, the civil movement 'Protest' [Ihtijej] was created by intellectuals from the city as an ultimate choice for facing the negative consequences of industrialization. As an expression of a 'model organic intellectual' expressed by Bourdieu (1968) in his rejection of neo-liberalism since the social action included only elite society. In response to this protest, SIAPE workers launched a similar one. This has created two opponents: a group struggling for environmental demands, against another group whose demands is social.

2.2. A historical review of the SIAPE and its handling of the environmental issue

The SIAPE was founded in 1947 in the city of Sfax, adjacent to its southern coastal strip (Gabes road, about three and a half kilometers). The plant covers an area of 120 hectares, adjacent to Tina 1 and 2, and Al Habib residential area. It launched the production of "Triple Super Phosphate" (TSP) which enabled the provision of high added value to the Tunisian phosphate extracted from the mines in Gafsa. In order to unify the companies operating in the phosphate treatment industries, the company of the Maghreb Chemical Industries, the fertilizer company "Gabes" and the chemical industry company in Gafsa were merged into the industrial company of phosphoric acid and fertilizer sin 1989. Four years later, the Arab Fertilizer and Phosphate Fertilizer Company, were merged within the Industrial Company for Phosphoric Acid and Fertilizers, to get the final name of the "Tunisian Chemical Group". Nevertheless, despite this transformation, the general public continued to call it with it popular name 'SIAPE' (Abdmouleh, 2008: 91). In 2017 the GCT has a labor force of around 1700 employees, instead of the 1309 employees in 2010 (Ben Fraj, 2017: 134). Its trade openness has increased with exports to countries such as France, Italy, Spain, India, China, Pakistan, Iran, Turkey and Brazil after Tunisia joined the World Trade Organization in 1994, and the Partnership Agreement with the European Union in1995 and its integration into the globalized economy. The plant used to have four 25-meter-high

chimneys, which were assembled in a single 70-meter high chimney. Therefore, the smoke that used to be limited to the neighboring area of the plant, spread all over the western part of the city because of the new height of the chimney. In addition, so far, the project to improve the gas washing process of the TSP unit and free the gas from the dust at the Sfax plant so that it eventually releases steam instead of smoke and to reduce its suffocating odor has not been completed. Finally, the decision to shut down the factory, taken by the previous political government and announced in 2008, has not vet been implemented Moreover, its solid wastes are collected in a 57-meter-high "Phosphogypsum" hedge, which extends over an area of 50 hectares. This has become a source of pollution, containing toxic substances and radioactive elements (Bouchhima, Rouis, and Choura, 2013; Azri, and Medhioub, 2001; Gargouri, Azri, Serbeji, et al. (2011) and Rouis, Bensalah and Ballivy, 1990). To avoid the environmental damage to the soil and the water table by SIAPE, the Earth Observation and Protection Project from the leakage of phosphogypsum was formed. However, this project was canceled because of the closure decision mentioned above. Similarly, the liquid wastes of the factory which are as polluting or more, are released in the sea. The responsibility for this pollution is shared between the SIAPE and the water treatment unit adjacent to the plant and belonging to the National Office of Sanitation.

Therefore, the GCT has air, water and earth polluting wastes because it does not adopt international standards, and which prove the absence of its social, moral and ecological commitment to its environment. Examples of the flouted international standards are:

- ISO 14000 which deals with environmental problems and industrial gaseous, liquid and solid pollutants released by factories.
- ISO 14001 concerning the measurement of the environmental impact of the activities of the factories such as the gases emitted into the air, the releases into the water and the various wastes buried under the soil. In addition, this standard encompasses the research on how waste is disposed of (Darwich, 2010: 277).

Based on these indicators, the debate arose between those who see SIAPE as an impetus for development and those who see it as an obstacle. Indeed, whereas it can be considered as an agent of social change and local development because it creates employment and spin

off enterprises and stimulates the regional economic activity (Ben Fraj, 2017: 283-298), it has some polluting activities such as the release of dust from dry sulfur discharges and gases from fuel and nitrogen oxides, contamination of the earth and the water table by the heaps of Phosphogypsum and the infection of the sea by thousands of milligrams per liter of fluorine caused from washing the gases and phosphogypsum). All this has made it an impediment to development and a damaging factor to the environment. As a consequence, a civic movement for sustainable development emerged. In Morin's terms on the negative effects of industrialization, "the industrial development constitutes two threats to societies and people which can be observed at the external level in the form of environmental degradation and the natural environment, and at the internal level in the shape of deteriorating the quality of life," (Morin, 2011: 82).

2.3. A social movement divided between environmental demands and social demands:

The environmental problem constituted a social phenomenon that engrossed the civil society in Sfax because of the indifference shown by the government before 2011 and by the successive governments since that date. Therefore, the Coordination initiated a first social movement entitled "We are suffocating", followed by another one after more than a year demanding the suspension of the activity of SIAPE as an important step to reclaim environmental degradation. This movement was called [Yizzi] in Tunisian local dialect meaning "Enough". As if the coordination complained from the government and to it, saying: "stop postponing the promises to shut down SIAPE. and let's stop being silent on our degraded environment". As a response to these environmental demands, the GCT disclosed an alternative project to replace the production of TSP by the production of Simple Super Phosphate (SSP), consisting of a physical mixture, which combines TSP grains, phosphogypsum and water, with no solid or liquid residues. This process releases only non-polluting gases conform to international standards (IAEA, 2013).

It is remarkable that the movement "Enough" that it enjoyed an acceptance from the intellectuals of the community. It also prevents the governments' repeated promises to rehabilitate the environmental situation, and is working to reshape the city's environmental landscape

and environmental awareness among the community. Hence, this movement works on changing the community from a passive subject to a conscious group, aware of its rights and fighting for them. However, in contrast to this social movement engaged for the environmental demands, another movement led by the power force of SIAPE was launched under the principle of identity, in Touraine's terms (2005). Indeed, it was their sense of identity that united them and motivated them to counter the civil movement by a social movement with social demands. Therefore, it seems that the GCT has succeeded in creating an identity for its workers recruted after the events of 14 January 2011, although it had failed to provide them with a sufficient degree of satisfaction prior to that date (Ben Fraj, 2017: 198). Actually, before those events, it was impossible to speak about identity among them, because most of them were not permanent employees. In addition, conflicts characterized their relationships due to the rotation of the night shifts and the weekends. Nevertheless, now because of their work stability, they have developed an identity and a union to defend their institution. Their only challenge has become how to keep SIAPE despite its environmental problems because it is their only tool to achieve their economic and social ambitions, such as training, hierarchical mobility and wage increases. Therefore, their conflicts preceding the 2011 events have been replaced by a unifying social solidarity to defend the survival of their institution.

3. Methodology

In order to better understand this tumultuous social relation and attempt to reply to the main research questions presented above, this work adopted a sociological approach based on both quantitative and qualitative methods. These are expected to help understanding the nature of the conflict SIAPE-Society. Simultaneously, it will simplify the analysis of the phenomenon of social movement conducted by the civil society motivated by a nascent awareness about the environmental degradation of the southern coastal strip of Sfax and a new social solidarity among all individuals for change and against pollution and its source. We also benefited from the concept of "conflict" of symbolic interaction, to understand the action, behavior, and culture of society. The direct observation and two series of interviews were conducted. Firstly, we interviewed seven executives from the GCT and the secretary general of the regional office of the

UGTT, and the spokesman for the Coordination of environment and development association. Then we conducted 100 interviews with a random sample of the inhabitants of Sfax.

3.1 The structured interview with the executive staff of SIAPE and UGTT

The nine interviews were conducted in June 2017. The sample was purposive. It was selected on the basis of the direct involvement of the respondent with the topic of the study. The interviewed people were: the secretary general of the regional office of the UGTT, the spokesman for the Coordination of environment and development association and seven executive members from the regional administration of the GCT and that of the factory. Every interview lasted less than half an hour. The questions of the interview were prepared in advance (Appendix 1). During the interview, we recorded the information in writing. In addition, we focused on direct observation to collect information from the respondent's facial expression and other body language that can reflect opinions. In the analytical stage of the interviews, we interpreted those observations and inserted them in the qualitative results.

3.2 The structured interview with the inhabitants of Sfax:

Table 1 shows the detailed distribution of the sample. Since the sample was randomly selected, the interviewers addressed random houses and interviewed the first person who answered the door, provided that it was aged 15 years or above. Thus, there were 61 females and 39 males interviewed. In terms of age, the biggest number consisted of those aged greater than 36 years. As far as the level of education was concerned, the majority of the interviewed people had a secondary education. However, in terms of location, the decision was made to distribute the interviews randomly in areas around the SIAPE factory, ranging from those living close to the factory to those living as far as ten kilometers away from it. Indeed, we hypothesized that the distance separating the home from the factory might affect the position of the people from shutting down SIAPE. Therefore, the number of the interviews in each area was evenly distributed on the five concerned administrative delegations of Sfax governorate (southern Sfax, western Sfax (Thyna), northern Sfax, eastern Sfax,

and medina Sfax) in order to get an idea as objective as possible of the inhabitants' opinion about the issue.

The interviews were very brief and consisted of collecting information on the questions written in advance (Appendix 2). Each interview lasted for a maximum of 20 minutes. The interviewer scarcely had to explain the question or reformulate it in case of illiterate persons. The data was recorded in writing. All the interviews were conducted in May 2017 right after the enough (yezzi) movement.

Table 1: Distribution of the sample

Gender		Age			Educational level				Location of home				
Fem ale	Ma le	1 5- 1 9	2 0- 3 5	> 36	illiter ate	Prim ary	Secon dary	Terti ary	Sou th	We st	Nor th	Ea st	Med ina
61	39	1 9	3 7	44	2	1	58	39	20	20	20	20	20

The analysis of the results relied on the quantitative computation of the answers and their transformation in percentages. We have also used the collected observations on body language and facial expressions of the interviewed people to formulate some qualitative interpretations.

4. Results and discussion

4.1. The Sfaxian community conceptions of the SIAPE:

The observation of the southern coast of Sfax calls for thinking about the future of this city and its natural capital available for the current generations, and what will remain for the subsequent ones. Like its inhabitants, the visitors of this region cannot miss to notice the absence of the sea from a typically coastal city. Its beaches and adjacent areas are colonized by an industrial zone containing various industrial enterprises of different activities. All this resulted in environmental problems. In this context, we wanted to investigate how the members of the Sfaxian community conceive of the SIAPE factory.

Firstly, as can be seen in table 2, independently of the various variables, the rejection of the continuity of the factory prevailed

among the inhabitants of Sfax. Indeed, 69percent of the respondents were for its closure. This is in line with previous results revealed by Ben Fraj (2017: 308). This author explained those findings by the concern of the people and their worry about the city deteriorating ecological situation and the desire to improve it and to create a balance between the industrial enterprises and the environment.

Table 2: Summary of the position of the Sfaxian inhabitants from shutting down SIAPE

	For shutting down SIAPE	Against shutting down SIAPE	No opinion	Total
Number	69	29	02	100
Percent	69	29	02	100

Secondly, as can be seen in table 3, the results of this field research showed that the gender, the age and the level of education had a strong effect on the position of the inhabitants.

Indeed, 55percent of the females; 44percent of those aged above 35 years; 39percent of those having a tertiary education or more were for the shutting down of the plant. Moreover, the variable of the proximity from the plant had an impact on the opposition to its continuity (Western (Thyna), Eastern and Medina Sfax). It seems that the closer to the factory the respondents lived, the more they were affected with the smell of its smoke and therefore the more they were aware of the threats it represented to the health and to the ecological structure of the city. The expressed reasons for such awareness were in the following order: the damage to the health and the environment, the disruption of the development process in the area, the exclusion of any beach enjoyment and finally the negative effect on the aesthetic and natural landscape of the region. Hence, the primacy of health, environmental and developmental harm over the aesthetics of the place highlights the awareness of the people about the dangers of pollution.

In contrast, those in favor for the continuity of the factory, the reasons were more economical. Indeed, they worried about the loss of the jobs provided by the factory; the damage that will be inflicted on the workers and employees of the factory and their families in case it was shut down; the end of the contribution of SIAPE to the regional as well the national development and the loss of the common land that will be privatized after the closure of the factory.

These conceptions, seemingly disregarding environmental and health hazards, show the respondents' low level of environmental awareness despite the fact that 13percent of them are living in Southern Sfax - in the neighborhood of the factory. This can be related to their low educational level. Precisely, only 28percent of them had a secondary education which may develop superficial thinking and absence of critical reasoning. This same segment is considered an environmental obstacle, since it does not have a high level of education or a specific cultural level that allows it to be aware of and defend its environment. Table 3: Detailed information about the positions of the Sfaxian community members from SIAPE

For shutting down Against shutting No Total Percentage **SIAPE** down SIAPE opinion Female 55 61 06 00 61% Male 14 23 02 39 39% Total 69 29 02 100 100% 15-19 07 12 00 19 19% 20-35 18 17 02 37 37% 1ge >35 44 00 00 44 44% Total 69 29 02 100 100% Illiterate 01 01 00 02 02% **Educational level** 00 00 01 01 01% Primary education Secondary 29 28 01 58 58% education Tertiary 39 00 00 39 39% education Total 69 29 02 100 100% Southern Sfax 07 00 20 20% 13 Location of home Western Sfax 20 00 00 20 20% Northern Sfax 02 16 02 20 20% Eastern Sfax 20 00 00 20 20% Medina Sfax 20 00 00 20 20% Total 69 29 100% 02 100

4.2. The SIAPE reaction to the community demands

The government reacted positively to the environmental demands of the civil movement, but the SIAPE did not comply with the government decision to shut down the plant which has remained open so far. The decision to recruit 71 superior executives at the Sfax compound in 2017 (GCT, 2014) is a form of its determination to continue. Thus, SIAPE appears to be in a position of power. This power is derived from winning the trust of its customers worldwide due to its professionalism in production, by adopting the ISO 17025 standard for analysis, laboratories and scientific research, which enabled it to improve the quality of production and to achieve the challenge of global competitiveness. The company also benefited from the "SIAPE Procedure", which provided the company with a specificity of productivity. This, can be observed currently in its benefits from the production of SSP one of its achievements. especially after the International Atomic Energy Agency report (IAEA) in 2013. In that document, the phosphor-gypsum was not classified as a contaminant material (IAEA, 2013). Hence, the SIAPE won the challenge which helped to decide on the persistence of the institution provided that the two polluting units in the factory are canceled. The SIAPE also derives its power and its balance from the identity grown in its workers, who are now defending its existence in the opposition of civil movement, indifferent to its environmental disadvantages.

The power of the institution and the continuity of its activity may be also due to its public nature. Indeed, the fact that it belongs to the state constitutes in itself a source of its moral and economic power. This allows it to contribute to the animation of the regional and national economy. It is worth mentioning that it has a substantial contribution to the Tunisian economy together with the mineral sector (INS, 2016). Furthermore, the support of the Tunisian General Labor Union (UGTT) is another strong point in its favor since it can be considered the most important strategic player in the Tunisian society in general. Indeed, the UGTT did not exert a social pressure on the SIAPE as it did during the comprehensive rehabilitation program for the Tunisian economy in 1996 (Ben Fraj, 2017: 240-41) and as it did when it supported the civil movement "Shut Down the Waste Disposal Site" in the city of Gabes. In contrast, here the UGTT became a supporter of the SIAPE and its workers. It was motivated by the protection of the

workers' socio-economic interests and its opposition to the privatization of the public sector.

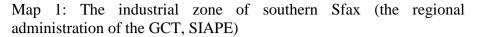
It seems that only in appearance does the conflict between the Coordination and the SIAPE have an ecological dimension. In reality, though, it raises the problematic issue of private economic investment. This is masked by the principle of reclamation of the southern coast of the city of Sfax. Such discourse was openly expressed by one of the Coordination members and reported by the local General Secretary of the UGTT. "The conflict over SIAPE land is a new attempt on what happened in the "Sfax Al Jadida" project, which took over the common lands and confiscated the poor families' lands, in order to expand the town center of the congested city, improve roads and enlarge them. Nevertheless, it ended by deepening the urban crisis, making the main roads more jammed due to bad planning and the search for private benefits. Therefore, we will do our best to prevent the recurrence of this bad experience", he argued.

Another important outcome is the divergence of the demands of the two social movements. The first movement is represented by the intellectuals, while the second is represented by the grassroots. It also reflects the psyche of each of these two different social strata at the level of needs, necessities and luxuries. The former is concerned with the question of the increasing degradation of ecosystems on the coastal shores of Sfax and the attempt to address them. The restoration of the "casino" at the commercial port in the center of the city and the opening of the beach with its planning, after it was closed since 1975, is proof of this. However, the main concern of the second movement is the employment, the maintenance of jobs and the prevention of the privatization of public institutions. This description is almost consistent with Bourdieu's reference to "luxury tastes or the quality of living and the tastes of necessity or work" (Bourdieu, 1976: 2-81). In this context, the following question arises: Is the social movement led by the SIAPE workers motivated by the principle of work place identity and concern for the institution or is it staged by their managers at work and other parties having an interest in the survival of the institution?

In contrast, the conception of community members of Sfax of the SIAPE factory before the events of 2011 seems to be fluctuating like their social and environmental conditions. The people who are worried

and are enthusiast for the decision to shut down the factory are those who are aware of a great health risk caused by the pollution. Simultaneously, these same people are those who protest and demand their right to be employed by the company (Ben Fraj, 2017: 306-19). The results of our current study show that the majority of the respondents were for shutting down the plant, yet their support for the Coordination remained insignificant. This can be explained by the fact that the concept of the environmental problems, that of the quality of life and that of sustainable development are elitist issues; i.e. only the most cultivated and educated people are sensitized to them. The majority of the people seemed to have supported the movement for other reasons. Firstly, they were the native people of the area who deplored the devastating effects of the SIAPE on their orchards of fruits such as figs, apricots, and fisheries resources in "Ain Fallet". Secondly, there were those who observed the massive immigration of job hunters who were attracted by the potential job availability in SIAPE. This phenomenon of geographical mobility caused the creation of slum areas around the factory and added another hideous landscape and polluted environment to the area. Therefore, many of the native inhabitants opted for moving to the much more prestigious residential areas in the northern suburbs of Sfax. Hence there were two opposed positions of the people. For migrants, SIAPE should continue operating because it was a source of employment. In addition, it represented a great advantage since it was in the proximity of their settlements in the slum areas. They did not care very much about the environmental issues. However, for the native residents of the area, the SIAPE threatened their health and their quality of life. The industrial facilities in general, and the SIAPE factory, in particular, devaluated their lands, their houses, and their rents by their ecological degrading effects. This observation is in total agreement with Faburel and Maleyre's study revealing that "aircraft humming reduces the financial value of housing" in the Orly region (Abdmouleh, 2013: 108). Therefore, they desired to leave for the high-end and clean residential areas.

Nonetheless, it is our belief that the social movement of the Coordination overlooked the real source of the pollution of the city. Actually, as can be seen in map 1 below, pollution does not seem to be coming solely from SIAPE alone.





In light of map1, the reclamation of the SIAPE area alone will not solve the region problem of environmental degradation. Indeed, because the plant is separated by a distance of about three kilometers from the sea, there are certainly other polluting industrial plants. This distance is occupied by salt marshes which extend over 12 kilometers. It is also bordered by the industrial zones "Sidi Salem 1 and 2", the oil mill waste water sewage (Marjeen) disposal site and the wastewater treatment station belonging to the National Office of Sanitation. Therefore, the Coordination should not limit the efforts of reclamation of the entire region to the focus on one place or another, because the reclamation must be global. Change must necessarily affect all the sources of environmental pollution to achieve a sustainable development.

The Coordination also overlooked the railway that runs along this strip, and the shipping points located in the commercial port at the city center to unload sulfur. Hence the reconciliation between the city and the environment seems almost impossible in the presence of sulfur dust from the ships in the port adjacent to the reclaimed casino. Our assessment of Coordination necessitates mentioning its "quasi-seclusion and its limitation to the elite of intellectuals. Yet, one of the characteristics of the civil society is its precedence in understanding the shortcomings in a society and its focus on solving the problems that the government failed to address through the principle of extending bridges of communication with all the social strata. For this purpose, one of its most important roles is to "sensitize and inform all

the members of the society about the problem and to work on solving it" (Ben Fraj, 2016: 4) in partnership because the environmental degradation of Sfax concerns all the members of its society. Besides. its quest to reclaim the southern coast of Sfax should be comprehensive. Industrialization is not the only cause of the environmental crisis of the city. The other factors can be the chaotic urbanization the random and uncontrolled growth of some residential zones along the southern coast, such as the "Ben Saida" and the "Agariba" residential zones, have caused urban environmental problems that have damaged the urban landscape. Moreover, the spread of anarchic heaps of solid wastes and the accumulation of household wastes affected the high-end residential areas such as "Soukra". This has led to the propagation of unpleasant odors and the proliferation of insects and stray animals such as pigs and dogs in "the Valley of Mao" which represents a living example of this phenomenon. In addition, one cannot miss the stagnant rain water in the main streets and roads such as the airport road. The roads that are not paved or very poorly paved. The sanitation stations are not provided in sufficient numbers. The absence of gardens, the disorganized spread of buildings, and the traffic congestion, especially at the rush hours in a city of 971.3 thousand inhabitants INS, 2016: 26) are no less important environmental problems leading to air, soil and water pollution, causing outbreaks of diseases and epidemics, and the deterioration of hygiene and public health. All these problems are due to several reasons, the most important of which are the absence of social and environmental awareness of individuals, the lack of social and environmental education, the lack of individuals' environmental ethics, the passivity of the city's municipalities and the phenomenon of urbanization leading to a decline in the quality of life. Therefore, the responsibility of the Coordination is primarily societal and its tasks are multiple and interrelated because it affects individuals, groups and society as a whole.

In light of these findings, this study recommends that to reconcile the SIAPE with the Sfaxian community, solutions must be found for the deplorable environmental conditions of the southern Sfax. In the present situation, it seems that industries can play no developmental role while damaging the ecological structures. In parallel, the civic movement led by the Coordination should also create solidarity with all members of society because environmental issue is a subject of

concern for the whole society and not only for the "elites". The Sfaxian community should show more solidarity between its members, structures, associations, elected and local authorities and create a "common sense", in Durkheim's terms (Durkheim, 1967), to improve the environmental situation of the city. The environmental issue is a societal responsibility that transcends all forms of conflict between structures.

5. Conclusion

In conclusion, the findings of this study revealed that firstly, the SIAPE interest in the environment was not satisfactory. Therefore, this was considered a developmental problem because "the natural environment is a condition for the success of development and its guarantor. The ruin of the environment is also a ruin of development." (Latour, 2005: 85). As a reaction to this behavior of the company, the members of the civil society developed a hostile attitude towards it and struggled for its closure. Secondly, it was observed that the social movement Coordination did not ask for money or any other assistance. Instead, they required from the GCT a better common sense and good intentions that distant them from provocative and manipulating discourses. Thirdly, this study found that Coordination deviated from its main objectives because it involved only the intellectual elites whose demands and desires differ from the common people. Besides, they focused on one source of pollution and overlooked the other ones. They failed to have a holistic consideration of the environmental problem. It is our belief that the Coordination cannot demand to establish the ideal model of the city as characterized by Max Weber (2014). However, it can do a lot to improve the quality of life in the city. This is a developmental problem. Hence, the city as a social phenomenon is capable of changing and developing civilly, morphologically and statistically to confront environmental pollution in all its forms.

In short, the Coordination should reconsider some issues in order to achieve its responsibilities towards the community in terms of environmental demands, eco-ethical orientations, awareness raising about the ecological dangers of industrialization, re-establishment of interpersonal relations and the reconciliation with the environment.

6. References

- Abdmouleh, Ridha. 2013. The citizen and the environmental issue: A socio-psychological study of the environmental conceptions and behaviors. Faculty of Letters and Human Sciences of Sfax.
- Abdmouleh, Ridha. 2008. La cause écologique en Tunisie, Sfax, GEDES.
- Azri, Chafai & Medhioub, Khaled. (2001). Caractérisation physicochimique de l'aérosol urbain dans la ville de Sfax (Tunisie). *Pollution Atmosphérique* W 170 : 279-291. Available at http://lodel.irevues.inist.fr/pollution-atmospherique/index.php?id=2781 . Accessed 20 June 2014
- Ben Fraj, Ismahan. 2016. Efficiency degree of associations in the propagation of the environmental ethics in the human resources development. In Proceedings of the International Symposium: the role of the private and local sectors in the human resources development. Sharm Elchikh, Egypt. 16-17 November 2016.
- Ben Fraj, Ismahen. 2017. *The industrial Enterprise: challenges and horizons, a case study of the Groupe Chimiqe Tunisien in Sfax.* 347. A thesis dissertation in sociology. The Faculty of Human and Social Sciences of Tunis. Unpublished.
- Ben Jemaa, Zouhair. 2016. Le verdict des sans voix : fermer la SIAPE. *Le Zénith* http://www.lezenith.tn/2016/11/01/fermer-lasiape/. Accessed June 20, 2017.
- Bouchhima, Lamia., Rouis, Mohamed Jamel., & Choura, Mohamed., 2013. Valorization of Phosphogypsum in Crushing-Sand-Phosphogypsum-Cement-Lime Solid Bricks Grade SW. *International Journal of Engineering and Advanced Technology* (*IJEAT*). 2/4. 43 49
- Boudon, Raymond et al. 2005. Dictionnaire de sociologie, Impression Bussières, France.
- Bourdieu, Pierre, Chamboredon, Jean-Claude, Passeron, Jean-Claude. 1968. *Le métier de sociologue : préalable épistémologiques*, Edition de l'école des hautes études en sciences sociales, France.
- Bourdieu, Pierre. 1976. Anatomie du goût, *Actes de la recherche en sciences sociales*. Vol. 2, n°5: 2-81.
- Comte, Augeste; Jones, H.S. (ed.); *Comte: Early Political Writings*; <u>Cambridge University Press</u>, 1998; <u>ISBN 978-0-521-46923-4</u>
- Darwich, Habib. 2010. Studies in issues of education, empowerment and integration. Tunis, Ettachfir el Fenni Press: 277-281.

- Durkheim, Émile (1994). "Social facts". In Martin, Michael; McIntyre, Lee C. Readings in the Philosophy of Social Science. Boston, MA: MIT Press.
- Durkheim, Emile. 1967. *De la division du travail social*. Les presses universitaire de France, 8e édition, Paris. Collection bibliothèque de philosophie contemporaine.
- Gargouri, Dorra, Azri, Chafai, Serbeji, Mohamed Moncef, *et al.*, 2011, Heavy metal concentrations in the surface marine sediments of Sfax Coast, Tunisia. *Environmental* monitoring and assessment, vol. 175, no 1-4, p. 519-530.
- Groupe Chimique Tunisien (GCT). 2014. Available at http://www.tunisietravail.net/concours-groupe-chimique-tunisien-pour-recrutement-de-346-candidat-decembre. Accessed on 20 June 2017.
- Institue National des Statistiques (INS). 2016. The Tunisian annual statistical publication 2011-2015
- Institue National des Statistiques (INS). 2016. Available at http://www.ins.tn/ar/publication/ Accessed on 22 June 2017.
- International Atomic Energy Agency (IAEA). 2013. Safety Reports Series, N°78. Radiation protection and management of norm residues in the phosphate industry. Available at: http://www-pub.iaea.org/MTCD/publications/PDF/Pub1582_web.pdf. Accessed June 20, 2017
- Latour, Bruno. 2005. Nous n'avons jamais été modernes, essai d'anthropologie symétrique, Paris, édition la découverte.
- Morin, Edgar (2011). La voie, pour l'avenir de l'humanité. Paris. Edition fayard.
- Rouis, Mohamed Jamel, Bensalah, Abdehamid, et Ballivy, George. 1990. Phosphogypsum management in Tunisia: environmental problems and required solutions. In : *Proceedings of the Third International Symposium on Phosphogypsum, Orlando, FL, FIPR Pub.* p. 083.
- Souraya, Ramadhan. 2016. Social mouvements « a sociological apprach ». *Journal of Human and Social Siences*. 24.
- The Tunisian Constitution. 2014. Act 44/26. Available at: http://www.tunisie-constitution.org/ Accessed June 17, 2017
- Touraine, Alain. 1955. L'évolution du travail des ouvriers aux usines Renault, Paris, CNRS.

Touraine, Alain. 1965. Sociologie de l'action, Paris, Edition Seuil.

Touraine, Alain. 2005. Un nouveau paradigme: pour comprendre le monde d'aujourd'hui. Fayard.

Weber, Max. 2014. La ville. Edition la Découverte.

Appendices

1. The structured interview for the executive staff of SIAPE, the Coordination spokesman and the UGTT

- Questions to the spokesman for the Coordination of Environment and Development Association in Sfax Could you introduce the Coordination?
 What are the main reasons for its call for shutting down SIAPE?
 - What are the main objectives of the Coordination?
- ii. Questions to the Secretary General of the regional Office of the Tunisian General Labor Union (UGTT)
 Why is the UGTT against shutting down SIAPE despite its undisputable dangers for the environment?
 What do you think of the Coordination demands? What are their real motivations for calling to shut down SIAPE?
- iii. Questions to an engineer in charge of the operation of the Simple Super Phosphate (SSP) and a senior technician at the laboratory of analyses and scientific research at the regional office of GCT in Sfax

 Could you introduce the SSP project as an alternative to the TSP that will allow the factory to survive?

 Is it really environment friendly as it was argued in the regional council meeting at the governorate in the presence of the minister of the environment, the governor, the Secretary General of the regional Office of the Tunisian General Labor Union and the spokesman of the coordination?
- iv. Question to the production unit manager during its climax and recession periods at the administration of the SIAPE factory, Sfax.
 - Could you inform us about the production process and its impact on the environment before and after the events of 14 January 2011?
- v. Question to the Human Resources Manager at the regional administration of the GCT in Sfax

Our work in Sociology revealed that SIAPE is suffering from aging. What is its position in face of the social movements of civil society? Will it stop recruitment of young people as it will be shut down in compliance with the demands of the civil movement, or will it recruit and continue its activity despite all this?

2. Structured interview for the inhabitants of Sfax

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ersonal information:

- i. Gender
- ii. Age
- iii. Educational level
- iv. Home location

B. Opinion

- i. For or against shutting down SIAPE?
- ii. Your reasons for shutting down the factory
- iii. Your reasons for keeping it open