



NeWater

THE IMPACTS OF ALQUEVA DAM IN THE DEVELOPMENT OF THE REGION



**Report of the NeWater project - New Approaches to Adaptive
Water Management under Uncertainty**

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0. Introductory note

Any big infrastructure like a dam always generates changes and outputs in the territorial system, and creates contradictory feelings (i.e. hate/love, lost/gain, restriction/opportunity, degradation/requalification, disillusion/expectation, and solution/generation of problems...).

Firstly, it changes the landscape and obliges a reorganization of ecosystems. Secondly, it has impacts in population dynamics, social processes and representations. Thirdly, it can motivate land use changes. Finally, could impact the economic system and change its dynamics.

However, an infrastructure like a dam in its own can not bring progress and development to a region (i.e. decrease unemployment, brings new inhabitants, create new companies, promote tourism, increase agriculture production, increase people life standards, and solve the social problems). The employment generated by a dam is big during the construction, but is very little during its productive process. Nevertheless, it can create opportunities in different economic sectors that generate permanent employment. In fact, a dam can be effectively a “window of opportunity” for development in areas considered depressed (i.e. aging, depopulation, unemployment, low economic productivity).

To take advantage of this potential is necessary: 1) a State that recognises and understands the real problems of the territory able to face new challenges with an integrate perspective of development; knowing the problems that the political and administrative procedures could put to the development process; able to integrate short-term and long-term perspective; able to inform people and look for new investment ideas; able to see that big investments are as important as small projects which could create small and median enterprises; on the one hand attract external investments to the region and on the other hand value the region internal resources; be more firm in the evaluation process, able to guarantee to people and economic groups an environment favourable to investments; 2) People well informed with new ideas and capacity of innovation whom must be informed and supported by technical staff. Only integrate a top-down and a bottom-up approaches the results could be a sustainable development.

During all the long process conducting to the construction of Alqueva Dam until now we found in the newspapers news from the all political spheres defending this infrastructure as a fundamental opportunity for the development of the Alentejo Region. It



truly is. In this study we intend to understand how, until now, this “window of opportunity” has been taken advantage off.



1. Methodology and data

1.1 The study area

The targeted population of this study was the inhabitants of sixteen villages surrounding the Alqueva and Pedrógão Dams. They are the nearest villages to the lake created by the dam and they are called Riparian Villages [“Aldeias Ribeirinhas”]. These villages, where live 12147 inhabitants, are spread across thirteen “freguesias” (parishes), and seven Municipalities (Table 1.1).

Table 1.1 –Identification of the case study

| Municipality | Parishes (Freguesias) | | Village |
|-----------------------|-----------------------|---------------------|----------------------|
| | Name | Inhabitants | |
| Alandroal | Capelins | 673 | Capelins |
| | Juromenha | 146 | Juromenha |
| Moura | Póvoa de São Miguel | 1095 | Póvoa de São Miguel |
| | | | Estrela |
| Mourão | Granja | 746 | Granja |
| | Luz | 373 | Luz |
| Portel | Alqueva | 449 | Alqueva |
| | Amieira | 436 | Amieira |
| | Monte do Trigo | 1245 | Monte do Trigo |
| Reguengos de Monsaraz | Campinho | 917 | Campinho |
| | Monsaraz | 977 | Monsaraz |
| | | | Telheiro |
| São Marcos de Campo | 840 | São Marcos de Campo | |
| Serpa | Pias | 3036 | Mina da Orada |
| Vidigueira | Pedrógão do Alentejo | 1214 | Pedrógão do Alentejo |
| | | | Marmelar |
| Total | | 12.147 | |



Source: Recenseamento Geral da População, INE, 2001

1.2 The survey

In order to analyse the impacts of Alqueva Dam in the development of the region, we adopted a quantitative and a qualitative approaches.

We implement a survey with the objective of analysing the impacts of the Alqueva Dam in the development of this area. The questionnaire was organised in three parts and integrate 23 questions. The questionnaires were implemented directly in the Riparian Villages [“Aldeias Ribeirinhas”] and only in two of the villages (Marmelar and Amieira) we did not get any questionnaires back (Table 1.2). In order to obtain a larger number of answers we ask for the collaboration of parishes’ president but not all of them were available to distribute the questionnaire.

Table 1.2-Number of questionnaires answered in each village

| | N | % |
|----------------------|----|------|
| Alqueva | 6 | 6,2 |
| Amieira | 0 | 0 |
| Campinho | 14 | 14,4 |
| Capelins | 4 | 4,1 |
| Estrela | 2 | 2,1 |
| Granja | 3 | 3,1 |
| Juromenha | 5 | 5,2 |
| Luz | 8 | 8,2 |
| Marmelar | 0 | 0 |
| Mina da Orada | 8 | 8,2 |
| Monsaraz | 6 | 6,2 |
| Monte do Trigo | 8 | 8,2 |
| Pedrógão do Alentejo | 16 | 16,5 |
| Povoa de São Miguel | 4 | 4,1 |
| São Marcos de Campo | 11 | 11,3 |
| Telheiro | 2 | 2,1 |
| Total | 97 | 100 |



The stratified sample used in this study (Almeida & Pinto, 1995; Cea D’Ancona, 1999; Ghiglione & Matalon, 2001; Reis et al., 2001; Hill & Hill, 2008), is composed by 97 cases (Table 1.2).

About 58.8% of the questionnaires were filled by males and 41.2% by females (Table 1.3) with ages comprehended between 12 and 86 years. The average age of the sample is 44 years old. One of the inquired individuals refused to reveal his age (Table 1.4).

Table 1.3 – Sample characteristics: Gender

| | N | % |
|--------|----|-------|
| Male | 57 | 58,8 |
| Female | 40 | 41,2 |
| Total | 97 | 100,0 |

Table 1.4 - Sample characteristics: Age

| | |
|----------------|----|
| Mean | 44 |
| Std. Deviation | 14 |
| Minimum | 12 |
| Maximum | 86 |
| N | 96 |
| Missing | 1 |

The data acquired from the questionnaires were subjected to statistical descriptive analysis through frequency tables and Main Component Analysis (MCA), for which 18 variables were selected and measured in 5 points in the Likert Scale (Reis et al., 2001; Hill e Hill, 2008). MCA was obtained using the SPSS 16.0 software, more specifically with the option *Analyze/Data Reduction/Factor*.



1.3 The interviews

In this qualitative study, in-depth, semi-structured interviews were conducted with all the presidents of the parishes considered in this study with the exception of the one of Capelins.

All presidents were interviewed between 11th and 13th of September or 2nd and 3rd of October of 2008. The president of Luz parish was interviewed by phone on November 19th. The main objectives of these interviews were, firstly, to know the main problems of the parishes and understand how the Alqueva Dam is contributing to resolve them. Secondly, which are, up to now, the main benefits related with the dam and how the parishes and the communities have been involved in the development strategy design. Finally, we wanted to understand the relation between the parishes, the municipalities and the public enterprise responsible for the management of the development program of the region- Edia - Empresa de Desenvolvimento e Infra-estruturas do Alqueva, S.A [Company of Development and Infrastructures of Alqueva, s.a.]..

Interviews ranged from 41 minutes (Monzaraz) to 2.2 hours in duration (Monte do Trigo). Each interview was fully transcribed and systematically analysed.

The interview analysis focus mainly in two dimensions: 1) the impacts of the Alqueva Dam; and 2) The involvement of parishes in the development plan design.

We also implemented an interview with EDIA President. By his demand the interview was sent by email and answer in a written way. This company was created in 1995 and is an anonymous society with public capitals exclusively. The main objective of this company is to conceive, execute, construct and explore the Alqueva Project [Equipamento de Fins Múltiplos de Alqueva (EFMA)], contributing to the promotion of the social and economic development of this region. The Alqueva Project is centred in Alqueva Dam and intends to attract investments and promote the development of one most underdeveloped European Regions (<http://www.edia.pt>).



2. COMMUNITIES OPINIONS

2.1 The survey: statistical analysis

The descriptive analysis of the variables relative to the dimension of the “Importance of the Alqueva Dam in people daily lives” allowed us to conclude that Alqueva Dam is an important issue in the thinking of local people daily lives. In fact, the great majority of individuals are focused on future developments associated to the Alqueva Dam. They are waiting to see new equipments and “something” that could change their lives and improve their quality of life (Table 2.1). However, there are still some people who miss the times before the construction of the dam, mainly because of the landscape, as in the previous configuration of the Guadiana valley existed some water-mills where the community used to have their meetings (Table 2.2). This sentiment can still be more important as most people do not feel direct benefits from dam.

Table 2.1: Opinion of inquired population about the affirmation “I think about future developments related with the Alqueva Dam”

| | N | Percentage (%) |
|---------------------|----|----------------|
| Never | 6 | 6.2 |
| Rarely | 16 | 16.5 |
| A few times a year | 13 | 13.4 |
| Once a month | 5 | 5.2 |
| A few times a month | 29 | 29.9 |
| Once a week or more | 27 | 27.8 |
| Missing | 1 | 1.0 |
| Total | 97 | 100.0 |



Table 2:2 Opinion of inquired population about the affirmation “I think about the times before the construction of the Alqueva Dam”

| | n | Percentage (%) |
|----------------------------|----------|-----------------------|
| Never | 6 | 6.2 |
| Rarely | 25 | 25.8 |
| A few times a year | 22 | 22.7 |
| Once a month | 6 | 6.2 |
| A few times a month | 14 | 14.4 |
| Once a week or more | 22 | 22.7 |
| Missing | 2 | 2.1 |
| Total | 97 | 100.0 |

First and foremost it seems that the impacts of the Alqueva Dam are very small in population livelihoods in face of the expectations.

A more detailed analysis of the relative dimension of the “Alqueva Dam general Impacts” (Table 2.3) confirms this idea. Effectively, the Alqueva Dam does not yet represents an effective factor of development for the implicated villages. Only a third of the inquired individuals (34.0%) affirm that the Alqueva Dam increased the quality of life in their villages. Equally, a reduced percentage of inquired individuals declare that their villages has gained with the construction of the Alqueva Dam (26.8%). Only 16.5% of inquired individuals consider that the water supply has improved after the construction of the dam and 26.6% considers that their expectations towards the dam have been satisfied.

Paradoxically, more than two thirds of the inquired individuals (69.8%) affirm that the Alqueva Dam is a motif of pride for the region. Furthermore, two thirds of the inquired population (67.0%) believes that the impact of the dam will increase in the future. People maintain a high level of expectation for the future.

People also recognize that are those from outside the region are responsible for the great majority of the investments already visible. At the agricultural level most changes are connected with Spanish investments in olive oil production.



Table 2.3: Opinion of inquired population about the general impacts of Alqueva Dam

| | % (Agree + Strongly Agree) |
|---|-----------------------------------|
| The Alqueva Dam improved life in my community | 34.0 |
| The impacts of the Alqueva Dam will increase in future | 67.0 |
| Most of the people in my community take benefits from the dam | 26.8 |
| The water supply is better after the construction of the dam | 16.5 |
| The number of foreign people is increasing in the region | 40.9 |
| My expectations with the Alqueva Dam have been satisfied | 26.6 |
| The Alqueva Dam is a motive of proud for the region | 69.8 |
| Most of the investments are made by people that are not from the community | 71.6 |

Taking into account the variable “Name of Suburb” and the variable “The Alqueva Dam improved life in my community” (Table 2.4) these answers show that the situation is different between the villages. The most interesting data can be seen in the Luz resident’s answers. These results can be influenced by different interpretations of the development concept, and also by effective improvements in the villages visible or felt by different social groups. In Campinho, Granja, Juromenha and Monte do Trigo people feel an effective improvement in the quality of life in their villages. The less positive opinions were registered in Alqueva (the village that gives the name to the dam and is closer to the infrastructure), Capelins, Estrela, Luz, Póvoa de S. Miguel e Telheiro. It is important to try to understand the reasons of these opinions. For instance, if in Capelins nothing seems to have change, in Alqueva the accessibilities increased a lot. In the case of Luz the old village was submersed by the increase in the water level and a completely new one was built. The houses and the accessibilities are better now, but the residents do not feel any improvement in community life may be because no change had happen in families’ economy.



Table 2.4: Opinion of inquired population about the affirmation “The Alqueva Dam improved life in my community general impacts of Alqueva Dam, having into account the locality and residence”

| | Name of suburb | | | | | | | | | | | | | |
|--------------------------|----------------|------|-----|----|-----|----|-----|------|------|---|------|------|------|-----|
| | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | XIII | XIV |
| (Agree+strongly Agree) % | 0 | 71.4 | 0 | 0 | 100 | 80 | 0 | 16.7 | 62.5 | 0 | 31.2 | 12.5 | 36.4 | 0 |

Key:

| | |
|------|----------------------|
| I | Alqueva |
| II | Campinho |
| III | Capelins |
| IV | Estrela |
| V | Granja |
| VI | Juromenha |
| VII | Luz |
| VIII | Monsaraz |
| IX | Monte do Trigo |
| X | Póvoa de São Miguel |
| XI | Pedrógão do Alentejo |
| XII | Pias |
| XIII | São Marcos de Campo |
| XIV | Telheiro |

Considering the “Social representation of the inquired population concerning the political decision of construction the dam” (Table 2.5), almost half (47.7%) of the inquired population remembers the moment, in 1975, when the political decision for the construction of the dam was made. Moreover, the majority of the population (83.5%) is perfectly aware of how time consuming was this project since the political decision in 1975 and the filing of the lake in 2002. More than half of the individuals inquired (58.0%) confirm to have been, in



some moment, sceptical about the construction of the Alqueva Dam since it first was projected. Furthermore, it is clear that no effort was made by the authorities to advocate the construction of the dam with the affected population. Merely 27.8% of the inquired population affirm to have had participated in public sessions in order to discuss the construction of the dam.

Table 2.5 “Social representation of the inquired population concerning the political decision of construction the dam”

| | % (Agree+Strongly Agree) |
|--|---------------------------------|
| I remember when the political decision to build the dam took place | 47.4 |
| The political decision to make the dam take several years | 83.5 |
| I was sceptic in relation to the construction of the dam since I began to hear about it | 58.0 |
| The local authorities promote public discussions to inform populations | 27.8 |
| I had got lots of information in the local newspaper, radio and television at that time | 36.1 |
| The localisation of the dam is inappropriate | 11.3 |
| I discussed a lot with my friends and neighbours about the decision to build the dam | 23.7 |
| Most of the people in my community agreed with the construction of the dam | 60.8 |
| Since the first time I saw Alqueva Dam as an opportunity of development | 72.1 |

Additionally, the affected population considers that the information given by the Media was irregular and insufficient. Only 36.1% of the inquired individuals state to have had received information about the dam through the Media. Another relevant information is how indifferent the population seems to be to the theme of the dam construction (merely 23.7% of the inquired individuals recognises to have discussed this theme with friends and neighbours). In addition, 60.8% of the population states to have been in favour of the construction of the Alqueva Dam. Finally, more than two thirds of the population inquired



(72.1%) declare to have considered, from the very beginning, the construction of the dam as an opportunity for development.

Table 2.6: “Social representation of the inquired population concerning the process of construction the dam”

| | % (Agree+Strongly Agree) |
|--|---------------------------------|
| I remember what happened during the construction of the dam | 59.8 |
| During the construction of the dam many jobs were created for local people | 37.2 |
| The construction of the dam employed many people from outside the region | 75.2 |
| I participated in the construction of the Alqueva Dam | 13.4 |
| During the construction of the dm the insecurity increased | 19.6 |
| The construction of the dam took too long. | 53.6 |
| I have bad memories about the period of construction of Alqueva Dam | 8.2 |
| The long process between the political decision and the conclusion of the dam disturbed very much local people’s life | 22.7 |
| The political decision to decrease the lagoon’s quota was appropriated | 28.9 |
| The Alqueva Dam construction must be done a decade before | 73.2 |

The analysis of the dimension of the “Social representation of the inquired population concerning the process of construction the dam” (Table 2.6) reveals that more than half of the inquired population remembers what happened during the construction of the dam. Nevertheless, the construction of the Alqueva Dam generated employment but not for the local population as can be corroborated by 75.2% of the people inquired. However, 13.4% declares to have been involved in the construction of the dam. A small percentage of the inquired population (8.2%) affirms to have negative memories from those times (e.g. great number of trucks, destruction of fences, bad behaviours of dam workers, bad state of the roads).

The delays in the construction also disturbed the lives of the local population (22.7%) but not as much we could supposed. At last, it is of note that more than two thirds of



the inquired individuals (73.2%) stated that the construction of the dam should have happened a decade before.

Table 2.7: “Social representation of the inquired population concerning the impact of the dam in the livelihoods”

| | % (Agree+Strongly Agree) |
|--|---------------------------------|
| Thanks to the dam I created a new business. | 4.1 |
| My income increased because Alqueva Dam | 4.1 |
| The construction of the dam changed the life of my family | 7.2 |
| I think my community is a good place to live | 70.1 |
| I use the infra-structures created by the dam for my leisure | 29.9 |
| Alqueva Dam changes my daily life | 8.2 |
| After the construction of Alqueva Dam I have more social contacts | 10.3 |
| I adopted a more modern way of living after the construction of Alqueva Dam | 6.2 |
| I am afraid that the traditional rural life will change a lot | 25.8 |

Considering the “Social representation of the inquired population concerning the impact of the dam in the livelihoods (Table 2.7), the general conclusion is that the Alqueva Dam, up to date, made no visible alteration in the populated daily lives. In fact, the number of inquired individuals that states to have created a new business (4.1%) or that their gains have improved (also 4.1%) with the dam construction is very small.

Moreover, the number of inquired individuals that considered the dam’s construction to have had an impact in their (8.2%) or their family (7.2%) daily lives is small. On the other hand, closely to a third of the individuals inquired (29.9%) affirms to using the touristic leisure infrastructures associated to the Alqueva Dam. The main reason for a low utilization of these infrastructures is its high price. Merely, 10.3% of the inquired population declares to have extended their social network after the construction of the dam.

In addition and relating to the life style, only 6.2% of the individuals inquired recognise to have modernized their social practices. In spite everything 25.8% of the inquired population is afraid that their traditional rural life style may be lost in the future.



May be this is not an indirect consequence of the Alqueva Dam but mainly a result of an internal dynamic rural world. Finally, more than two thirds of the population inquired (70.1%) states that their villages are a good place to live. This strong connexion is an important factor useful in development process.

Concerning the dimension of the “Perception of the inquired individuals about how important the public opinion is when making local political decisions” (Table 2.8), it is possible to affirm that the inhabitants feel incapable to influence the local political decisions.

Table 2.8: “Perception of the inquired individuals about how important the public opinion is when making local political decisions”

| | % (Agree+Strongly Agree) |
|--|---------------------------------|
| The opinion of citizens is important to influence the local political options/decisions in the region | 34.0 |
| The local authorities try to know the local communities opinion and aspirations to define the development strategy for the region. | 42.2 |
| The local authorities try to satisfy the communities’ interests | 62.9 |
| The decisions made by the local authorities about the Alqueva Region development leave me satisfied | 34,0 |
| The dialogue between local population and local political authorities never has been tense. | 52.6 |
| Local environmental associations have been important to defend the communities’ interest close to the local authorities and the government. | 31.9 |

In fact, only a third of the inquired population (34.0%) believes that the public opinion is taken into account when making local political decisions. Additionally, 42.2% of them consider that the local authorities (parishes’ president) make some effort to know the aspirations of the local population for the development of the region. Some level of trust is evident in this opinion but the involvement of the low administrative level in the governmental decision level has been very low. The decisions made by the local authorities about the Alqueva Region development leave satisfied only 34% of the inquired population. This is a result of a lack of communities’ participation in the design of the development plan for the region. In all the development of the region the government consider the communities as simples recipients and are not interested in integrate, in all the strategies, the interests of the people. It is clear that no involvement and no engagement with the communities are searched by the government. It is important to point out that a little more than half of the



population (52.6%) states that the relation between the population and the local authorities has been, up to date, pacific.

Attending to the actions of environmental associations, only a third of the inquired population (31.9%) believes that they have been relevant in the defence of the local population interests next to local authorities and government.

Finally, almost two thirds of inquired population (62.9%) believes that the local authorities try to satisfy the interests of the local community even if the results are not the best.

Taking into account the “Perception of the inquired individuals concerning the investment prospects” (Table 2.9) the general belief is that there are some problems concerning the access of the population to the new investment possibilities. Being so only a third of the population affirm knowing how to obtain information about the investment opportunities projected for the region and almost half (47.4%) declares to be difficult to access the information. Furthermore, only a third of the inquired population believes that the local authorities try to maintain the population informed of the investment opportunities programmed for the region. There is a public company responsible for defining and coordinate all the development process; however the local authorities, namely the parishes which are closer to the communities, are not properly informed.

The analysis of the variables referring to the “Perception of the inquired individuals concerning the reliability of the information concerning the Alqueva Dan circulating in the Media and other sources” (Table 2.10) allowed us to conclude that there is some apprehension concerning the news circulating in the Media and other sources. In fact, as can be seen in Table 2.10, the number of inquired individuals that considered as reliable the information circulating in the Media and other sources is invariably low, with the exception of the television with 44.3%. Concerning the printed press, the reliability of the national and regional newspapers are almost the same. It is interesting that a significant number of people already try to use the internet to get information.



Table 2.9: “Perception of the inquired individuals concerning the investment prospects”

| | % (Agree+Strongly Agree) |
|--|---------------------------------|
| It’s difficult to find information about the opportunities of investments planned for the region | 47.4 |
| I know how to get information about the possibilities of investments | 31.0 |
| The local authorities try to maintain the population informed about the opportunities of investments. | 28.8 |

Table 2.10: “Perception of the inquired individuals concerning the reliability of the information concerning the Alqueva Dan circulating in the Media and other sources”

| | % (Reliable+Very Reliable) |
|------------------------------|-----------------------------------|
| National Newspapers | 34.0 |
| Regional Newspapers | 36.1 |
| Television | 44.3 |
| Radio | 31.0 |
| The local authorities | 38.1 |
| Associations | 29.9 |
| Friends | 35.1 |
| Internet | 35.1 |

The cultural and environmental associations were the sources which presented the lowest value (29.9%), being the sources considered less reliable when transmitting information about the Alqueva Dam. Considering the Media the radio is considered the less reliable as only 31% of the inquired individuals consider the information, concerning the Alqueva Dam, given by the radio, as reliable.

Regarding the “Perception of the inquired individuals concerning the impacts of the Alqueva Dam in the environment” (Table 2.11) allowed us to conclude that the majority of the inquired population believes that the construction of the infrastructure did not have negative consequences in the natural and cultural heritage as only 21.1% of the inquired



individuals consider that the dam had negative impacts in the natural and cultural environment. One problem, referred several times by the people inquired, was that only a small of trees and bushes were cut in the flooded area. This has impacts in water quality and puts in danger the sailing boats in some places.

A little more than half of the inquired population (51.5%) understands that the touristic improvement plan takes into consideration the natural environment and the biodiversity of the region. Taking into account the Urban Requalification Plan for the closest villages, merely 43.3% of the inquired individuals affirms see changes and that the urban quality of the villages has improved.

Table 2.11: “Perception of the inquired individuals concerning the impacts of the Alqueva Dam in the environment”

| | % (Agree+Strongly Agree) |
|---|---------------------------------|
| The Alqueva Dam promotes a depreciation of the cultural heritage | 21.7 |
| Since the construction of the Dam the quality of the urban areas have increased | 43.3 |
| The tourism development plan takes in consideration the nature conservation and the biodiversity of the region | 51.5 |

When analysing the dimension of the “Direct impacts of the dam construction in the proprieties”, the crossing between the variables “I had properties which were flooded” and “Name of suburb” (Table 2.12) demonstrates that inhabitants of eight of the sixteen villages involved where affected by the filing of the lake. The inhabitants of the villages of Alqueva (50.0%) and Estrela (50.0%) where the more affected.



Table 2.12: Opinion of inquired population concerning the affirmation “I had properties which were flooded”, taking into account the locality and residence.

| | Name of suburb | | | | | | | | | | | | | |
|--------------------------|----------------|-----|------|------|---|-------|------|------|----|---|------|-----|--------|-----|
| | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | XIII | XIV |
| (Agree+Strongly Agree) % | 50.0 | 8.3 | 25.0 | 50.0 | 0 | 50.0* | 33.4 | 0 | 0 | 0 | 14.2 | 0 | 25.0** | 0 |

Key:

| | |
|-------------|---|
| I | Alqueva |
| II | Campinho |
| III | Capelins |
| IV | Estrela |
| V | Granja |
| VI | Juromenha |
| VII | Luz |
| VIII | Monsaraz |
| IX | Monte do Trigo |
| X | Póvoa de São Miguel |
| XI | Pedrógão do Alentejo |
| XII | Pias |
| XIII | São Marcos de Campo |
| XIV | Telheiro |
| * | 3 missing answers were registered in the village of Juromenha. |
| ** | 2 missing and one invalid answers were registered in the village of São Marcos de Campo. |

We think this information is not very significant because the lost of lands occurred in all the thirteen parishes. The most important is the personal impacts of the lost of lands in livelihoods.

It is possible to infer from the analysis of the variable “Perception of the inhabitants of the village of Luz concerning the consequences of the delocalization of the village” (Table 2.13) that the majority of the population was hurt by this change, as 87.5% states that it would have preferred to stay in the old village. In fact, three quarters of the inquired



individuals (75.0%) declares that the reason why they had to leave their old house was the filling of the lake but half (50.0%) states that the house they have now is better than their old one. However, the change had psychological damages and some of the inhabitants received the new house and sold it and went to other places. None of the inquired individuals recognises that the monetary compensation received was adequate to the village delocalization.

Table 2.13: Opinion of the people of the village of Luz concerning the consequences of the village delocalization.

| | % (Agree+Strongly Agree) |
|---|--------------------------|
| I had to leave my house which had been flooded. | 75.0 |
| The financial compensation I received it was adequate. | 0,0 |
| My new home is better than the old one. | 50.0 |
| I would prefer to stay in the old village. | 87.5 |

Concerning the new irrigation system promoted by the Alqueva Dam related to the variables “The irrigation’s plan promoted by Alqueva Dam benefits my properties” and “Name of suburb” (Table 2.14), it is possible to infer that the inhabitants of the sixteen villages considers the global irrigation system, infrastructure of the EFMA (Empreendimento de Fins Múltiplos do Alqueva), benefits their properties. The inhabitants of the villages of Juromenha (60.0%) and Campinho (37.5%) stated that they have had used the EFMA irrigation system.

Table 2.14: Opinion of inquired population about the affirmation “The irrigation’s plan promoted by Alqueva Dam benefits my properties”, taking into account the locality and residence.

| | Name of suburb | | | | | | | | | | | | | |
|-----------------------------|----------------|------|-----|----|---|------|------|------|----|---|------|------|------|-----|
| | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | XIII | XIV |
| % (Agree+Strongly Agree) | 0 | 37.5 | 0 | 0 | 0 | 60.0 | 12.5 | 16.7 | 0 | 0 | 18.8 | 12.5 | 18.2 | 0 |



Key:

| | |
|-------------|-----------------------------|
| I | Alqueva |
| II | Campinho |
| III | Capelins |
| IV | Estrela |
| V | Granja |
| VI | Juromenha |
| VII | Luz |
| VIII | Monsaraz |
| IX | Monte do Trigo |
| X | Póvoa de São Miguel |
| XI | Pedrógão do Alentejo |
| XII | Pias |
| XIII | São Marcos de Campo |
| XIV | Telheiro |

Nevertheless, some of the inhabitants of the villages of Campinho, Luz, Monsaraz, Pias and São Marcos de Campo believe that using the irrigation system might be difficult (Table 2.15) as it supposes an important investment, this is especially evident in the inhabitants of the village of Luz (33,4%).

Table 2.15: Opinion of the inhabitants of the villages of Campinho, Juromenha, Luz, Monsaraz, Pedrógão do Alentejo, Pias and São Marcos de Campo concerning the statement “It will be difficult to use irrigation because it is too expensive and I can not do the investment”

| | Name of suburb | | | | | | |
|---|----------------|-----------|------------|-----------|----------|-----------|------------|
| | I | II | III | IV | V | VI | VII |
| % (Agree+Strongly Agree) | 11.1 | 0 | 33.4 | 16.7 | 0 | 12.5 | 22.2 |



Key:

| | |
|------------|-----------------------------|
| I | Campinho |
| II | Juromenha |
| III | Luz |
| IV | Monsaraz |
| V | Pedrógão do Alentejo |
| VI | Pias |
| VII | São Marcos de Campo |

Regarding the type of agriculture (Table 2.16), the new irrigation system only had already produced alterations in the properties of the inhabitants of villages of Juromenha (50%), Monsaraz (16,7%), Pedrógão do Alentejo (23,1%) e São Marcos de Campo (44,4%). Concerning irrigation we like to present two comments: i) the land that benefits from the irrigation system is not as large as local people might have thought; ii) all the irrigation potential seems not to be used properly by people due to some regulation.

Finally, in the villages of Juromenha and Pias half of the inquired individuals are responsible for the water capture and distribution in their properties (Table 2.17), on the other hand in the villages of Campinho and Luz no inquired individual declare to have this responsibility.

Table 2.16: Opinion of the inhabitants of the villages of Campinho, Juromenha, Luz, Monsaraz, Pedrógão do Alentejo, Pias and São Marcos de Campo concerning the statement “With irrigation I change the kind of agricultural production”

| | Name of suburb | | | | | | |
|---|----------------|-----------|------------|-----------|----------|-----------|------------|
| | I | II | III | IV | V | VI | VII |
| % (Agree+Stronlgy Agree) | 0 | 50.0* | 0 | 16.7 | 23.1 | 0 | 44.4** |



Key:

| | |
|------------|--|
| I | Campinho |
| II | Juromenha |
| III | Luz |
| IV | Monsaraz |
| V | Pedrógão do Alentejo |
| VI | Pias |
| VII | São Marcos de Campo |
| * | 3 missing answers were registered in the village of Juromenha. |
| ** | 2 missing and one invalid answers were registered in the village of São Marcos de Campo. |

In the fourth question of the enquiry a small word association game was proposed. In this game we asked the inquired individuals to indicate two words that best translate the meaning of the Alqueva Dam has to them. Of the 58 different word attained, thirty six of them have a positive meaning (**Table 2.18**).

Moreover, among the words with positive meaning cited “*development*” was the one mentioned more times, with a total of 32 citations, followed by the words “*water*” (mentioned 14 times), “*employment*” and “*wealth*” (cited 7 times each) Furthermore, words such as “*expectation*” (n=2), “*future*” (n=5) and “*hope*” (n=3) were also used to describe people feeling towards the Alqueva Dam.

Table 2.17: Opinion of the inhabitants of the villages of Campinho, Juromenha, Luz, Monsaraz, Pedrógão do Alentejo, Pias and São Marcos de Campo concerning the statement “I agree to do myself the works to get water into my properties”

| | Name of suburb | | | | | | |
|---|----------------|-----------|------------|-----------|----------|-----------|------------|
| | I | II | III | IV | V | VI | VII |
| % (Agree+Strongly Agree) | 0 | 50.0* | 0 | 20.0 | 23.1 | 50.0 | 22.2** |



Key:

| | |
|------------|---|
| I | Campinho |
| II | Juromenha |
| III | Luz |
| IV | Monsaraz |
| V | Pedrógão do Alentejo |
| VI | Pias |
| VII | São Marcos de Campo |
| * | 3 missing answers were registered in the village of Juromenha. |
| ** | 2 missing and one invalid answers were registered in the village of São Marcos de Campo. |

Regarding the words with a negative connotation 22 different ones were used to translate people feelings towards the dam. The words more frequently used were “*sadness*” (mentioned 4 times), “*nothing*” (used 3 times) and “*nostalgia*” (mentioned twice). Words such as “*disillusionment*” (n=1), “*dissatisfaction*” (n=1), “*futility*” (n=1), “*uselessness*” (n=1) or “*displeasure*” (n=1) can be a manifestation of the disappointment that the inquired individuals feel about the fact that the impacts of the development project for the geographic area affected by the Alqueva Dam are yet to be seen.

In syntheses the most important conclusions are: local communities think that the Alqueva Dam creates a “windows of opportunity” for the development of the region. However, they have not yet seen changes in their livelihoods. Most of the changes do not beneficiate directly the residents because only some of them have the possibility to take advantage of the touristic equipments, mainly because of the price. However, people maintain alive their expectations and believe that the development will increase in the future.

Concerning the use of water for domestics uses there were no changes with the construction of the dam. For instance in Pias, due to the bad quality of the water supply from Enxoé Dam, in the last two summers it was made everyday by a truck of the parish.



Table 2.18: Social Representations: “The two words which better translate the feeling for the Alqueva Dam.”

| Words with a positive connotation | | Words with a negative connotation | |
|--|----------|--|----------|
| Word | N | Word | N |
| Agriculture | 3 | Delay | 1 |
| Alentejo | 1 | Desertification | 1 |
| Amusement | 1 | Disillusionment | 1 |
| Beauty | 1 | Destruction | 1 |
| Benefit | 1 | Displeasure | 1 |
| Bigger | 1 | Dissatisfaction | 1 |
| Dam | 1 | Egocentrism | 1 |
| Development | 32 | Futility | 1 |
| Economy | 1 | Imperfection | 1 |
| Electricity | 1 | Inequality | 1 |
| Employment | 7 | Interests | 1 |
| Energy | 2 | Lack | 1 |
| Evolution | 2 | Nostalgia | 2 |
| Expectation | 2 | Nothing | 3 |
| Fine | 1 | Restrictions | 1 |
| Fishing | 1 | Sadness | 4 |
| Future | 5 | Scepticism | 1 |
| Hope | 3 | Subuse | 1 |
| Important | 1 | Uncertainty | 1 |
| Improvement | 2 | Unemployment | 1 |

Regarding the establishment of the development plan strategy the local communities had a very limited participation and were only informed of the decisions already made. This evidence must be submitted to a more detailed investigation. The analysis of the interviews is important to validate this evidence.

The irrigation plan does benefit only partially the closest parishes and local people regret this situation.

Agricultural changes are already visible and they had mainly been promoted by Spanish enterprises. Large olive oil plantation had been established. Their impacts small impacts at the creation of jobs.



2.2 The survey: Main Component Analysis

Concerning the Main Component Analysis (MCA) made in this study, as mentioned before, this analysis is based on 97 cases and 18 variables (Table 2.19).

Table 2.19 Main Component Analysis: identification of variables

| Identification of variables | |
|-----------------------------|--|
| 1 | “The agriculture income will increase with irrigation” |
| 2 | “There is an increase of demand of agricultural lands” |
| 3 | “There is an increase of demand of houses for touristic purposes” |
| 4 | “The number of tourists increased in my community” |
| 5 | “After Alqueva Dam there are more cultural events”; |
| 6 | “The Alqueva Dam is an essential infra-structure for the economic development of Alentejo” |
| 7 | “During the construction of the dam many jobs were created for local people” |
| 8 | “The construction of the dam employed many people from outside the region”; |
| 9 | “The irrigation’s plan promoted by Alqueva Dam benefits my properties” |
| 10 | “The irrigation’s plan will be very important to the development of the area” |
| 11 | “I am thinking to create a new business related with the Alqueva Dam opportunities” |
| 12 | “The dam creates opportunities for some of my friends and family” |
| 13 | “There are new people living in my community” |
| 14 | “In my community new infra-structures have been created” |
| 15 | “The Alqueva Dam has negative environmental impacts” |
| 16 | The landscape is more beautiful now |
| 17 | “The natural heritage destroyed by the Alqueva Dam was not very important” |
| 18 | “The Alqueva lake is a way to promote the Alentejo Region development” |



The propose of using the MCA consisted in understanding if the Alqueva Dam construction had any visible impacts in the affected villages recognizing that up to now the impacts are scarce.

Previously to the MCA application an analysis of the matrix to be used was made. According to Andy Field (2005), a correlation matrix is adequate when variable measure in an identical scale have a great variance discrepancy. In fact, calculating the Variation Coefficient ($v = s / x$) it was possible to conclude that fourteen of the eighteen variables had an elevate distribution ($VC > 30\%$, elevated distribution). Being so, we decided to analyse the correlation matrix.

In order to determine if the MCA was adequate we also used the Bartlett Test of Specificity. Through the referred test it was possible to reject the null hypothesis that states that there is no correlation among the variables (Table 2.20). According to the Kaiser-Meyer-Olkin (KMI) Test the MCA is reasonable as the value attained is 0,664.

Table 2.20: KMO and Bartlett's Test

| | | |
|---|-------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | | 0,664 |
| Bartlett's Test of Sphericity | Appox. Chi-Square | 464,400 |
| | Df | 153,000 |
| | Sig. | 0,000 |

The “mirror image” of the correlation matrix proves that the MCA is adequate, as indicates the occurrence of elevate coefficient values in its main diagonal (Table 2.21).



Table 2.21: “Mirror image” of the correlation matrix

| Var. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 0.535 | | | | | | | | | | | | | | |
| 2 | -0.468 | 0.476 | | | | | | | | | | | | | |
| 3 | -0.040 | -0.402 | 0.787 | | | | | | | | | | | | |
| 4 | 0.106 | 0.079 | -0.321 | 0.673 | | | | | | | | | | | |
| 5 | 0.308 | -0.153 | -0.177 | -0.015 | 0.740 | | | | | | | | | | |
| 6 | -0.247 | 0.007 | 0.071 | -0.071 | -0.298 | 0.822 | | | | | | | | | |
| 7 | 0.221 | -0.211 | 0.002 | 0.132 | 0.030 | 0.107 | 0.622 | | | | | | | | |
| 8 | -0.082 | 0.019 | -0.043 | -0.055 | -0.065 | 0.008 | 0.002 | 0.726 | | | | | | | |
| 9 | -0.125 | 0.217 | -0.013 | 0.228 | -0.203 | 0.136 | -0.073 | -0.057 | 0.346 | | | | | | |
| 10 | 0.164 | -0.306 | 0.149 | -0.078 | 0.289 | -0.290 | -0.044 | 0.045 | -0.255 | 0.630 | | | | | |
| 11 | -0.012 | 0.096 | -0.061 | 0.108 | -0.010 | 0.133 | -0.077 | 0.048 | 0.066 | 0.016 | 0.653 | | | | |
| 12 | -0.147 | -0.002 | -0.156 | -0.108 | -0.225 | -0.124 | -0.256 | -0.103 | -0.099 | -0.070 | -0.433 | 0.710 | | | |
| 13 | -0.116 | 0.108 | -0.101 | 0.035 | -0.169 | -0.156 | 0.114 | -0.016 | -0.042 | -0.170 | -0.097 | 0.215 | 0.687 | | |
| 14 | 0.149 | -0.165 | -0.032 | -0.340 | 0.155 | -0.081 | 0.107 | 0.044 | -0.326 | 0.085 | -0.211 | 0.053 | -0.295 | 0.704 | |
| 15 | -0.290 | 0.405 | -0.200 | 0.005 | -0.054 | -0.026 | -0.167 | -0.037 | -0.008 | -0.110 | 0.042 | 0.076 | 0.058 | -0.067 | 0.533 |
| 16 | -0.234 | 0.279 | -0.034 | -0.068 | -0.079 | 0.086 | -0.003 | -0.149 | 0.103 | -0.148 | 0.165 | -0.225 | 0.046 | -0.210 | 0.311 |
| 17 | 0.114 | -0.069 | 0.049 | -0.070 | 0.086 | -0.077 | 0.033 | 0.013 | 0.031 | 0.008 | -0.227 | -0.041 | -0.323 | 0.125 | -0.209 |
| 18 | -0.308 | 0.370 | -0.176 | 0.131 | -0.321 | -0.377 | -0.455 | 0.101 | 0.193 | -0.187 | 0.007 | 0.259 | 0.193 | -0.266 | 0.471 |

| Var | 16 | 17 | 18 |
|-----|--------|--------|-------|
| 16 | 0.712 | | |
| 17 | -0.138 | 0.714 | |
| 18 | -0.005 | -0.221 | 0.628 |

Examining **Table 2.22**, it is possible to see that six variables were extracted, more precisely the six variables that have a value higher than one. In fact the six variables obtain account for 65.853% of the variance of the initial data.



Table 2.22: Total Variance Explained

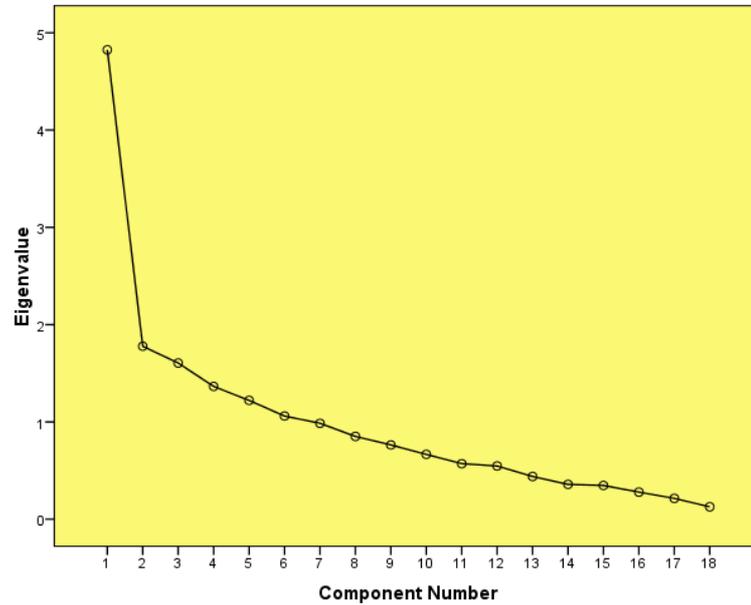
| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 4,825 | 26,804 | 26,804 | 4,825 | 26,804 | 26,804 |
| 2 | 1,777 | 9,874 | 36,678 | 1,777 | 9,874 | 36,678 |
| 3 | 1,605 | 8,917 | 45,595 | 1,605 | 8,917 | 45,595 |
| 4 | 1,365 | 7,582 | 53,177 | 1,365 | 7,582 | 53,177 |
| 5 | 1,221 | 6,785 | 59,963 | 1,221 | 6,785 | 59,963 |
| 6 | 1,060 | 5,890 | 65,853 | 1,060 | 5,890 | 65,853 |
| 7 | 0,986 | 5,475 | 71,238 | | | |
| 8 | 0,851 | 4,727 | 76,055 | | | |
| 9 | 0,763 | 4,239 | 80,294 | | | |
| 10 | 0,666 | 3,701 | 83,995 | | | |
| 11 | 0,571 | 3,171 | 87,166 | | | |
| 12 | 0,547 | 3,039 | 90,204 | | | |
| 13 | 0,439 | 2,440 | 92,644 | | | |
| 14 | 0,358 | 1,990 | 94,634 | | | |
| 15 | 0,347 | 1,925 | 96,560 | | | |
| 16 | 0,278 | 1,546 | 98,105 | | | |
| 17 | 0,214 | 1,188 | 99,293 | | | |
| 18 | 0,127 | 0,707 | 100,000 | | | |

Extraction Method: Principal Component Analysis

Moreover, **Graphic 1** reveals that after the six components the values are mainly situated in the inferior part of the graphic, revealing a tendency to make a “almost horizontal line” (Pereira, 1999). The six component represents a braking point in the components to include in the MCA.



Fig. 1: Screen Plot



When analysing the Component Matrix (**Table 2.23**) it is possible to see, for example, that variable number 7 (“During the construction of the dam many jobs were created for local people”) has three components (1, 2 e 3) that are vital to explain its variable. For this reason, a rotation was made, in order to transform the coefficient of the main component into a more elementary structure. The used method was “Varimax”, that, according to Alexandre Pereira, “*intends that, for each main component, only a few significant values and all other are close to zero*” (Pereira, 1999, p.80).



Table 2.23: Component Matrix

| Variables | Component | | | | | |
|-----------|-----------|--------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | 0.482 | 0.014 | 0.153 | -0.518 | 0.313 | 0.007 |
| 2 | 0.465 | -0.037 | 0.366 | -0.525 | 0.301 | -0.224 |
| 3 | 0.663 | 0.297 | 0.307 | -0.178 | -0.024 | -0.194 |
| 4 | 0.417 | 0.425 | -0.132 | -0.193 | -0.459 | -0.227 |
| 5 | 0.686 | -0.078 | 0.124 | 0.171 | -0.141 | 0.035 |
| 6 | 0.761 | -0.214 | -0.253 | -0.122 | 0.093 | 0.014 |
| 7 | 0.395 | -0.434 | 0.401 | 0.374 | 0.176 | 0.043 |
| 8 | 0.136 | 0.371 | 0.327 | -0.156 | -0.297 | 0.364 |
| 9 | 0.140 | 0.428 | 0.062 | 0.229 | 0.351 | 0.646 |
| 10 | 0.477 | -0.126 | -0.263 | -0.119 | 0.403 | 0.250 |
| 11 | 0.403 | 0.256 | 0.235 | 0.553 | 0.111 | -0.298 |
| 12 | 0.591 | 0.177 | 0.541 | 0.217 | -0.052 | -0.006 |
| 13 | 0.450 | 0.378 | -0.554 | 0.015 | 0.184 | -0.052 |
| 14 | 0.609 | 0.310 | -0.323 | 0.033 | -0.113 | 0.096 |
| 15 | -0.420 | 0.556 | 0.046 | 0.069 | 0.321 | -0.102 |
| 16 | 0.554 | -0.080 | -0.070 | -0.024 | -0.454 | 0.305 |
| 17 | 0.459 | 0.118 | -0.346 | 0.322 | 0.129 | -0.314 |
| 18 | 0.716 | -0.516 | -0.171 | 0.111 | -0.041 | 0.047 |

Extraction Method: Principal Component Analysis

a. 6 components extracted

The observation of the Component Matrix (**Table 2.24**) after the Varimax rotations allowed us to conclude that each main variable tends to be explained in great part by a single factor. In fact, variables **5** (“After Alqueva Dam there are more cultural events”), **6** (“The Alqueva Dam is an essential infra-structure for the economic development of Alentejo”), **16** (“The landscape is more beautiful now”) and **18** (The Alqueva lake is a way to promote the Alentejo Region development”) appear to be associated with main component 1. It explains 26,8% of the variance and was named “**Alqueva Dam a image for development**”.

On the other hand, variables **13** (“There are new people living in my community”), **14** (“In my community new infra-structures have been created”) and **17** (“The natural heritage destroyed by the Alqueva Dam was not very important”) seem to be associated with main component 2, called “**Quality and Dynamic**”.



Main component 3 is composed by variables **7** (“During the construction of the dam many jobs were created for local people”), **11** (“I am thinking to create a new business related with the Alqueva Dam opportunities”) and **12** (“The dam creates opportunities for some of my friends and family”) and is called “**Economic Opportunity**”.

All the same, main component 4 is constituted by variables **1** (“The agriculture income will increase with irrigation”), **2** (There is an increase of demand of agricultural lands”) and **3** (“There is an increase of demand of houses for touristic purposes”) and was designated as “**Changes in rural world**”.

Variables **4** (“The number of tourists increased in my community”) and **8** (“The construction of the dam employed many people from outside the region”) are related to the main component 5, which was named “**Population mobility**”.

Finally, variable **9** (“The irrigation’s plan promoted by Alqueva Dam benefits my properties”) is connected with main component 6, called “**Irrigation system**”, but is not significant.

It is important to point out that variable **10** (“The irrigation’s plan will be very important to the development of the area”) has 4 components (6, 1, 2 e 4) which are decisive to its variability and that variable **15** (“The Alqueva Dam has negative environmental impacts”) has a value of 0.164, which is insignificant considering the dimension of the sample (Field, 2000).



Table 2.24: Rotated Component Matrix^a

| Variables | Component | | | | | |
|-----------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | 0.141 | 0.106 | -0.015 | 0.757 | 0.071 | 0.110 |
| 2 | 0.074 | -0.028 | 0.152 | 0.854 | 0.034 | -0.093 |
| 3 | 0.094 | 0.257 | 0.432 | 0.531 | 0.375 | -0.085 |
| 4 | 0.047 | 0.481 | 0.066 | 0.110 | 0.553 | -0.339 |
| 5 | 0.501 | 0.200 | 0.438 | 0.147 | 0.194 | 0.037 |
| 6 | 0.604 | 0.440 | 0.082 | 0.376 | -0.055 | 0.057 |
| 7 | 0.443 | -0.255 | 0.571 | 0.105 | -0.235 | 0.155 |
| 8 | -0.033 | -0.117 | 0.054 | 0.078 | 0.666 | 0.201 |
| 9 | -0.132 | 0.124 | 0.137 | -0.027 | 0.194 | 0.843 |
| 10 | 0.349 | 0.326 | -0.073 | 0.347 | -0.198 | 0.399 |
| 11 | -0.062 | 0.263 | 0.784 | -0.037 | -0.022 | 0.011 |
| 12 | 0.175 | -0.007 | 0.708 | 0.253 | 0.342 | 0.104 |
| 13 | 0.022 | 0.807 | -0.022 | 0.106 | -2.424E-5 | 0.159 |
| 14 | 0.261 | 0.634 | 0.106 | 0.077 | 0.299 | 0.135 |
| 15 | -0.754 | 0.072 | 0.023 | -0.053 | -0.038 | 0.164 |
| 16 | 0.614 | 0.174 | 0.042 | -0.018 | 0.455 | 0.044 |
| 17 | 0.129 | 0.626 | 0.330 | -0.022 | -0.203 | -0.067 |
| 18 | 0.828 | 0.227 | 0.195 | 0.152 | -0.161 | 0.001 |

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

a. Rotation converged in 13 iterations



3. THE PARISHES'S PRESIDENT OPINIONS

From the interview to parishes' Presidents we selected two dimensions: The impacts of the Alqueva Dam in the region development and the involvement of parishes in the development plan design

3.1 The impacts of the Alqueva Dam

The parishes' president identifies as the most important problem the lack of employment in the area which contributes to the depopulation of the area. In fact, between 1991 and 2001 the sixteen parishes lost 10% of the population. Only Pedrogão do Alentejo had an increase of 2% of the population. The decrease of population was most important in Capelins (-23%), Granja (-18%) and Monsaraz (-18%). The main reason for the decrease in population is the lack of employment mainly qualified jobs. Most of the young people that finish the high education do not find a job in the region.

When questioned about the social dimension and impacts of the Alqueva dam the parish's presidents diverged in opinion. Some of them (e.g. Campinho, Jerumenha and Monsaraz parish's president) considered the dam to be an infrastructure of unequivocal value to the parish's and felt some improvements. The Luz parish benefits from a new village. Another (Amieira parish's) considered it to be an infrastructure of relative value to the closet village to the lake. The others are still waiting to see the advantages of the dam construction beyond the improvement on accessibilities, some urban requalification and organization of sportive events.

In the Campinho parish, the construction of the dam was essential to stop the depopulation and degradation of the parish, in the opinion of the president. In fact, due to the construction of the Dam this village became specialized in the organization of sportive and cultural events:

“If it was not for the construction of the Alqueva dam this village would continue to degrade and depopulate...(…) we consider that our village has a privileged situation within the Municipality of Reguengos where the lake is considered... and it can benefit immensely, on the one hand (with some reservations)... people who bought a house here and workers... on the other hand with tourism... we made a safe bet on event



organization... the all village was vocation for it... and since then we organized a series of events... ”

Moreover, the President of Campinho parish emphasizes the progresses made in the accessibilities in this village as consequence of the urban requalification program of the Riparian Villages promoted by Gestalqueva:

“The accessibilities of the region are inserted in a requalification project... Before the road from São Marcos to Cumeada and from Cumeada to the village and within the village were very bad...(...) today you got here through a very good road and the village streets are also very good... this was finished this year... 8 years ago none of this infrastructures existed and that was a shame to us...”

In Campinho the felling is of anxiety to see all the pending projects related to the dam finished more precisely the Alqueva Park – tourist Project of Potentially National Interest (Potencial Interesse Nacional (PIN)) to be developed by SAIP (Sociedade Alentejana de Investimentos e Participações) –, which is a potential source of employment and tourism to the village:

“The dam in its own is nothing more than a geographic landmark, is not it?... (...) We all have to make the most of it... (...) Now, what do we need the most? We need the touristic infrastructures that have already been approved and are part of the PDM[Municipal Landscape Planning] ... It has been already published in the “Diário da República” the SAIP-Roquete’ Project (the name of the leader of the company responsible for the project; a well know person in Portugal), which is... how is it called?... Alqueva Park... which will generate about 2,000 new direct jobs... and taking into account all the other activities that might also prosper indirectly... As consequence this is a very good investment to the Municipality and the region... (...)They are right next to this village...”



In the village of Monsaraz (and in the locality of Telheiro which belongs to the same parish), the benefits of the dam construction are already evident. Monsaraz has a vast cultural heritage and being so its vocation for tourism is prior to the Alqueva dam. However, after the construction of the Dam, the number of tourists visiting Monsaraz increased considerably. In Monsaraz, are located more than half of the hotel and touristic infrastructures of the Municipality of Reguengos de Monsaraz:

“(Referring to the Alqueva Dam) It is already contributing and we hope that in the future and increase in this contribution... Because the localization of Monsaraz is strategic in this water plan... and so it is many times called “The Heart of the Lake”... is by far the village with the highest projection for tourism... (...) Moreover, at this time the Village of Monsaraz has more than half of the hotels and touristic infrastructures... when considering all the Municipality of Reguengos de Monsaraz... Before the Alqueva Dam and even Alqueva Monsaraz had already a vocation for tourism because of its Patrimony, History and all other qualities besides the water... Now if you add the Big Alqueva Lake the Village potential increases... There is a new reality to explore in which we put a lot of hopes for the future... (...) In the last 4 years there has an increase in the number of tourists visiting Monsaraz. The number of visitors is incredibly high... I do not think that anyone in the area would consider possible so many visitors 5 years ago. This increase in tourism demands a bigger effort of all, namely municipalities and touristic industry... It is a fact that Alqueva Dam improvement for the surroundings of the Monsaraz Castle...”

Among the projects for the parish’s president points out that the construction of the Monsaraz Nautical Centre, will be a fundamental infrastructure expected to enhance sports activities namely through private investment:

“There is a project to construct a nautical centre in Monsaraz (Monsaraz Nautical Centre)... It will be constructed in an area of the River Guadiana with some tradition called Moinho do Gado, which is the place where the population used to have their meetings... The marina and the



nautical centre are going to be constructed... Right now a small marina already exists and serves as harbour for the boats making the cruises along the River Guadiana... and also for some private boats... The marina also has a bar which is explored by the Lifeguard Association which is responsible for the security of the lake in this area... Obviously other infrastructures are necessary to make the connection between the cultural heritage and the water in order to create new touristic attractions... These changes should come shortly and through private partnerships... Because this is the only way to face up the investments and reach the set objectives... Some things are already very advanced... one of the planned infrastructures already projected includes a Sailing Club and other spaces water related that will benefit us immensely...”

Concerning road infrastructures and although some localities in the parish of Monsaraz continue without good and modern accessibilities, the roads that connect the village to the Alqueva dam are very good. On the other hand, the Monsaraz President minimizes the environmental impacts of the Alqueva Dam. In his opinion there are even some advantages. The Natural Patrimony is being reconstructed spontaneously and some of animal species initially abandoned their natural habitat are now coming back:

“It is clear that the Natural Patrimony lost will never be recovered... but its impact in Monsaraz is small... and I think not only in Monsaraz but also in the surrounding area... the majority of the area inserted in the Alqueva dam has a significant natural patrimony, either in animal and plant species and also in landscape... The margins of the River Guadiana had a specific fauna and flora and that is irreversibly lost... However, in my opinion these impacts are not necessarily negative... As there is a lot more besides what was lost... A lot more... And the lost is not very significant at least in this area... Actually, it is spontaneously being reconstructed and it can be noticed... In several areas that are now margins of the dam and that before were far away from the River Guadiana... (...) it can be noticed the typical morphology of the margins of the River Guadiana... Because the landscape is very similar... this is what I meant before... We are in a plane with some hill ... the ground here is all



very alike so you can not see the difference between the original margins of River Guadiana and the lake created by the Alqueva Dam...Even with relation with species... some of the birds in the area have been relocated into other areas...however, now the birds that first abandoned the area are coming back...”

The Amieira parish has the best localization close to the lake. Amieira parish's President recognises a relative development of the village as consequence of the construction of the Alqueva dam. As positive results he points out the increase in the number of tourist as consequence of the improvement in accessibilities and the construction of the marina in Amieira, which has also a restaurant:

“(Referring to the Alqueva dam) Globally some localities and villages in the area have developed, areas that were totally abandoned due to the politics of several governments... (...) All this area of the Interior of Portugal is completely abandoned by the governments since ever and the Alqueva dam help to develop a little this area... It is not what people might imagine, because apparently no big changes can be (hesitation)... I do not know... I have not notice a great impact until now... And, in the future let's see I do not know... However, it was only in the last 4 or 5 years that the dam was completed... (...) (Referring to the increase in tourist in the village) A lot of the people that visits the area nowadays and more concretely the village of Amieira... there is a lot of people, especially in the weekends that visits the area... they like to see the dam and we have here a great tourist infrastructure, the “Amieira Marina” Yesterday I was there speaking to the engineer responsible and he told my that during the weekend it was always full... Everything is going well in spite that during the week days the number of visits is smaller... the prices are a bit high... (...) Being so the village population does not go there... The marina was not made for us... the village population goes there to visit not to use the infrastructure... The view from there is magnificent...It is all very beautiful... But using the infrastructures, no... because not everyone can afford it...It is impossible (...)



The accessibilities were one of the best improvement relate directly with Alqueva Dam construction.

If it was not for the the Alqueva Dam this village would be totally isolated... The accessibilities were all terrible (laugh)... the roads were narrow and in bad shape... It was impossible to get to Reguengos (head of the municipality) as there was no bridge... (...) the dam brought all this... brought a new bridge to Portel (head of the municipality) and another to Reguengos... Great accesses....Nowadays Amieira is probably the village with the best accesses... This is very clear, the best roads... and this is very important otherwise people could not came here, is not it so?... In that aspect we have no complains...”

However, in the parish president understanding, the Alqueva Dam is not an infrastructure capable to decrease the depopulation of the adjacent villages and in particular of Amieira. Due to the lack of employment in these villages the young population, in the president opinion, tends to go to the most important cities in Alentejo, such as Évora:

“The biggest problem of these villages that the dam has not yet solved and probably never will is fixating the population in the villages... The great problem of Amieira is the incapability of fixating the young... neither the young (laugh)... the people who come to Amieira are those who when to Barreiro or Lisbon in their 20th and 30th... A lot of people that went there to work and now, that are retired, is coming back... Only these come back... because the young those that are in the prime of life those go away... If I tell you that in last 3 years in Amieira no baby was born, it becomes clear (laugh)... We have 5 children in the school... And so... it will probably close (hesitating)... we have no arguments to fight with the Mayor ... (...) I am sure that the reason it has not closed yet is because there has been a big investment in the area. How does the government justifies (hesitating)... I mean how you justify that after an investment of millions of Euros in the area, specifically in Amieira and Alqueva, two first



grade schools close because there are no children... I have seen schools that have 20 students close and ours has 5 and it has not been closed yet... No chance (laughs)... There are no people... the young all leave... When they leave to study (hesitating)... For example, when they complete the 9th grade in Portel and leave to Évora to finish the 12th grade they do not come back... Because there is nothing here that fixates them... What do we have here to fixate them? We have no factories... anything... any employment... The agriculture here is over... is dead..."

Regarding the village of São Marcos de Campo, its president of the Junta of the parish resumes the advantages from the Construction of the Alqueva Dam as an improvement in the accessibilities:

"We expect the lake to bring a lot of things to the village that we have not yet seen... as I was saying we really need it... (...) Concerning accessibilities a road connecting São Marcos to Alqueva has already been made... A bridge to Amieira ... Now they are making a road to Reguengos and in every village surrounding Alqueva the accesses are being improved... (...) Up to date the improvements are limited to accessibilities... nothing else..."

According to the São Marcos parish president this village has not yet taken benefits from the Urban Requalification Program promoted by Gestalqueva. In fact, the recuperation of the village has been promoted by the City Hall of Reguengos de Monsaraz:

"São Marcos is one of the villages affected by the Alqueva Dam... However up to date what we have are only words, nothing else... We have a sine saying so and that is it... in Monsaraz they have a sine saying "Welcome and something else..." And it is a village with vocation for tourism... they made some improvements... they had a vast plan for Monsaraz... (Reproducing, ironically affirmations allegedly made by the responsible for EDIA or Gestalqueva) "We are doing this... and that..."



Nothing... is what they effectively did... The streets and roads are what they are (hesitating) now recovering... They recovered our streets... everything is paved now... That is good... But that was made by the City Hall... It is possible that the City Hall might have received some money to do it and that benefits all of us... However, if Gestalqueva, which belongs to EDIA, made some specific plans for the village of São Marcos, I do not know..."

Furthermore, the president points out that in spite the promise, made by Gestalqueva, of building a Picnic Park for the village this Project has been postponed until now:

"We were promised a Picnic Park... The plan keeps come back and forward... and up to date nothing... (...) Nothing has come to São Marcos yet..."

In the Village of Alqueva the big wave of development promised by the politicians of the Alqueva Dam has yet to be felt, in the words of its president, we are not in the "second page":

"I have been here for two turns now and every single day I pass the development page... It is a pity that I am still in the first page and expecting the second, because the big developments have not yet reached the second page... I am really worried about that..."

In concern to tourism there is a great incoherence in the Village of Alqueva. Most tourist visits to the Village of Alqueva are what can be called "passing through tourism":

"Nowadays people always ask me the same question and probably you will to: "Mr. President how is the tourism in Alqueva, nowadays?"... I mean, that is what everyone questions me about nowadays... Today, people passing through and we are still in the first page and people ask: "Is this Village of Luz?"... Incredible... (...) After all, people are just passing through... and that makes me a little sad..." (...) "We want a modern



Alqueva... It is required an Alqueva that opens the doors to tourism... and that is what we want... we do not want a tourists that are only passing through... (...) We want a tourism that stops in the village... Being so I say that my tourism not lost but a little miss guided...”

Moreover, the president of the parish points out the good results that came from the Urban Requalification Project implemented in the Village of Alqueva and says that it is necessary the construction of a hotel in the village to promote tourism:

“I brought you here to the parish building and I can take you to the Santo António Chapel or the Village’s Church and through the streets. I have great streets with Great illumination... But, that is not enough... That is why I have not yet pass from the first page... I have a lot to say... I have been saying to the president of EDIA, Mr Troncho, that we do not have an hotel near the dam for people to stay in... we have a land just waiting for someone with courage to say “This is reserved for a hotel” ...”

To conclude, the Alqueva parish’ president claims an effective development for the village and in particular investments that will generate employment for the young people, point out that his claims were unheard by Gestalqueva or EDIA:

“Here we wanted a little bit of hope... And that hope (hesitating)... Now they are starting some work in the dam... (...) Now you will ask me: “So Mr. President, were you hopping for more development and more beauty?”... We will wait a little more... (...) And I say this with great sadness... I have been telling the government representatives... and they answer me: “Be calm Mr. President that will be done”... And so I keep living is that calm (laughs), but every day I feel weak...” (...) “We have the offices of Gestalqueva, where the meetings of EDIA occur... they have meetings every day... Every day people watch... and people talk... And I know that that people are disappointed... (...) They do not give me many hopes... no... the hopes they give me is that they are going to do something... (Reproducing the declarations of the responsible for EDIA



and Gestalqueva) “We are planning... We are planning...”... For the village I asked for investments which would generate employment for the young... there is lack of employment... My employs here (hesitating)... I am very sorry for the young people of the village... they have to go to Switzerland, France and Germany to work and they live their wives and families behind... They stay their for 2 months and then come for 4 or 5 days... that is how it has to be...”

It is in the parish of Pedrógão do Alentejo that is situated the dam destined to function as dyke for the Alqueva Dam. (the village of Marmelar is part of the Pedrógão do Alentejo parish). According to the President the infrastructure are a motif of pride for the village and a guaranty for the future, pointing out the allowed irrigated area in the village area:

“First and foremost we have a great pride in this dam... Secondly, the future... Now, about that future, as I have told you, little things have been made and we are constructing the irrigation channels which is very important for the region... We already have channels since the Álamos Dam to Vito... and from Vito to Cuba... From Cuba to Vidigueira... And now they are projecting the channels for the Pedrógão... This goes directly to Beja... They are majoring... That will be a reality... And when considering the agriculture that is a necessity in this region...”

Effectively, the parish president is aware of how long it takes to develop these villages and emphasizes some sportive events that have taken place in the Pedrógão Dam:

“The projects promised by Gestalqueva and EDIA take a lot of time to see the light... In reality, the only thing EDIA made here was the Pedrógão Dam... Now the responsibility is of Gestalqueva that has offered us a project besides the fishing platform... This past weekend we had here the National Juvenile and Junior Fishing Championships... In the 21st we will have other National Championships... we also received all the championship from the municipality and from Beja and other fishing



associations... This one was organized by the Portuguese Fishing Federation... It was the first time that this event was made here... We hope this will continue and we would like to extend our fishing platform... Maybe some day we could host the European or the World Championship... This is what we are doing right now with some sacrifice because, as you know, the expenses continue to grow but the budget is the same... We are very proud to be apart of this municipality and we hope that a better future will come to us... ”

As in the village of Alqueva, in Pedrógão do Alentejo people hope that with the help of both Gestalqueva and EDIA the project of the marina, the gas station and a training complex will bring touristic development:

“(Referring to the fishing platform) That we did without anyone help, even from EDIA... Only the authorization for the fishing platform was given by the City Hall... Now, not even the fishing platform that we have initially thought how do you say?... 3 in 1, we made in the same space 3 different spaces... A marina... a gas station, for the boats and a training complex so the ones that came to practice those sports can keep their boats... And maybe a street for the participants... (...) We are waiting for a big gesture from Gestalqueva... Maybe Mister..., from Évora will help us with that... We are moving forward with the project... he hope that soon it will be a reality and besides the more infrastructures we have, the probability that other investments will come... So we are starting and we hope that big investors from hotels, camping, and rural tourism will follow our example and come to the village...”

Moreover, in Pedrógão do Alentejo and taking into account the words of its president, the effect of the Urban Requalification Program has not yet been felt in spite the fact that the parish administration was called to identify the works needed and start the construction. Furthermore, no changes have been made in the villages' accessibilities until now:



“(Referring to the fact that the village has yet to benefit from the Urban Requalification) Up to now, nothing... I have the project over there... the project for the villages (hesitating)... What I have there is the improvement and pavement of several streets... Sidewalks... A square... (...) we and Marmela, that belongs to our parish, have a project... But, until now... (...) (Referring to the fact that the City Hall asked the parish to identify the work that needs to be done) Yes, exactly... That what we have there in the plan, precisely... Accessibilities and some other things... We were going to substitute the pavement for granite... especially, in the main streets... (Referring to the fact that the work identified as urgent by the parish has yet to start) No, no... nothing has been done... that only in paper and nothing else... I do not know if any of my colleges (hesitating)... if they knew they would have told me... Anything new, in the City Hall, we know... Being so, as nobody is say anything is because (laughs)... People do not forget to talk about those things... (Referring to no new accessibilities were project to the village) No... Everything is the same...”

In the Póvoa de S. Miguel parish, which encloses the Riparian Villages of S. Miguel and Estrela, many of the commitments assumed by the responsible entities for the Development Project of the area have not yet been honoured:

“Concerning infrastructures I think that the progresses are far from what would we consider desirable, right? The parish of Póvoa was the most affected by the filling of the Great Lake of the Alqueva, more than six thousand hectares where submerged... Therefore, we contribute a lot for the Dam construction... By the way, Póvoa was the parish that lived essentially from agriculture; the majority of farms had to close their doors because entire properties were submerged and so the landowners saw themselves obligated to cease their agricultural activity... Regarding infrastructures, a lot was promised but little has been made so far... Actually, right now in my parish we have no dormitory... For example the village of Estrela, it is a pity (hesitating)... a lot was projected for that village including an urban plan [Plano de Pormenor] which has been dragging on for years... In fact, it has not yet been concluded... (...) I think



that the Municipality of Reguengos de Monsaraz is the one that up to now has benefit the most with Alqueva... (...) We here... and not being pessimistic, in my opinion the Alqueva is a more value to us, but we are not making the most of it... Therefore, it could be more, give more... People come here to visit and do not (hesitating)... if they do not have a place to sleep where they go to other villages and...”

Weighting the benefits felt in terms of the accessibilities, the President of Póvoa de São Miguel parish states that the effect of the Urban Requalification Program was none but the collocation of plates announcing the names of the Riparian Villages within the parishes. It is clear that, although the scope mentioned in the program included the pavement of roads, recovery of the façades or construction of buildings, no initiatives were taken in order to reach the mentioned objectives:

“(Mentioning the improvements in accessibilities) Yes in this aspect improvements were felt. (...) Obligatorily, because most roads were submerged... If it had not been for this the accessibilities probably would not have been made... Now, when the water started to rise and some roads are interrupted they were obliged to make new roads, in this aspect we have new infrastructures... (...) (Mentioning the effect of the Program of Requalification of the Riparian Villages in his parish) Very little, very little... Look what I remember, right now, was the creation of signalling in the Riparian Villages, throughout the roads we can see blue plates indicating, S. Miguel, Estrela, Luz in the entrance of the Great Lake... this is what was made and little more... (Mentioning the fact that in the scope of the Program for Requalification of the Riparian Villages, no recovery plan was implemented in his parish). No... (Referring to the fact that in the scope of the Program for Requalification of the Riparian Villages, no façade recovering had, up to the present, taken place in his parish). No... (Regarding the fact that, in the scope of the Program for Requalification of the Riparian Villages, no initiative concerning the construct of buildings has been implemented in his parish) No, at least in my parish it has not... If in some it has, in mine nothing was made...”



In the parish of Pias, where the Riparian Village of the Mina da Orada is located, the initial expectations around the Alqueva Dam have been, in some way, frustrated, in the measure that only some parts of the village have been enclosed in the area irrigated:

“(Mentioning the Alqueva Dam as a development factor for his village) Yes, in the beginning, even so not as much as we thought... I thought that more parts of the village would be enclosed in the irrigated area and, then I thought that all the zone here, which possesses a great potential for agriculture, was enclosed within the irrigated land plan... And it is not totally included, but it is better than nothing...”

This parish is struggling with a problem related with the quality of the water of the Enxoé Dam that guarantees the water supply to the parish, especially in years where the precipitation is low in the winter and in the summer. In this direction, the President of Pias parish intends that the Enxoé Dam might be supported by infrastructures of Alqueva and Pedrógão, thus preventing the water supply to the population from being made by barrels through the firemen, in problematic years, such as this one:

“Anyway, I find that, we are tired of fighting so that the dam we have here could be supplied by the Alqueva or Pedrógão Dams... I still do not know... Two or three weeks ago we are struggling and we had to start giving people water from the deposits because the water from the dam is improper for consumption... If it could be supplied by the other dams we would not have this problem... We are supplying water to the people because the water improper for consumption, it can not be used for cooking, nor drinking... And we have to provide... The firemen come and take deposits that we have filled them and later we deliver to the people here... The people come with the barrels, to drink and to cook... (...) Nevertheless, with the time that the Dam already has, I find that this problem should have been resolved, because it is a real pity with a lake of that size...Even more, with the Pedrógão Dam being constructed in our parish this delay in supplying this Dam, and I find this to be a first necessity, because the people (hesitating)... As you can see we have to go



and distribute water to the people with barrels and sometimes people are not at home... Some are served well, others are not. This is a great problem that we have here, but I find that the dam with the time that it already has, should have resolved this problem...”

Relatively to the Riparian Village of Mina da Orada, the project for the requalification of the locality has encountered the opposition of an important landowner, who, up to now, interdicted the construction of a road and the installation of the sewer and water supply network:

“Everything that has been made in this system of the Riparian villages is all made in Mina da Orada and not in other Pias parish communities... What happens? Mina da Orada has a problem that most people probably do not know, but there is one gentleman who actually is not from here... He is from the North, came here and later bought everything... (...) I think that he is trying to make things more difficult, make it more difficult for the village development ... (...) They [EDIA] speak with him, and he has a temper and later... Anyway, the talks continue between him and EDIA so this can be decided... Because the gentleman says that all lands are his and maybe they are... If he bought them so they are his... (...) The gentleman has a coffee shop and a supermarket, has everything, and he is the only one benefiting from it... He owns the village... The problem is that the City Hall just made the route of the road to that place... The EDIA is negotiating with him, only with him... We arrive at Mina de Orada and he wanted, and with some reason, he wanted that the road passed in front of his coffee shop and not go around it... (...) This is probably the reason why he is unhappy. I do not know if everything has been solved, or not... I hope that everything is decided well... (...) Tomorrow I have a meeting in the City Hall and I am going to ask why it is taking so long and why EDIA has not yet started working in that zone, if the delay is because of that gentleman.... If the problem is that gentleman we can always proceed in another way... We just have to speak with the people of the village and inform them that the gentleman is delaying the progress of the road... (...) I hope that it will not



come to this, because the gentleman knows that the development that is coming also benefits him... (...) We promise in our last term or in the one before last, the water and sewages to Mina da Orada, but we cannot make it come true because everything is his... We want to construct a Children's Park, but the gentleman says that everything is his and we do not have a chance..."

It is important to point out that the Urban Requalification Program of the Riparian Village of Mina da Orada still includes the construction of a bridge and the repair of another one:

"I think that they made the assessment of that, I think they did... I also think that the project has already been made, they have to construct a bridge following Uncle Manel Tavern... (...) There is also a bridge a little down on the road and they have to raise everything down there... That is a good project, but it has not yet started ... I do not know, I do not know if the reason why it has not yet started is because of this... I think that they had to pay an indemnity to one lady who is sister-in-law of that Mr. [the gentleman who owns most of the land in Mina de Orada] ... Now, I do not know if it is already resolved, or not..."

In this Riparian Village, the construction of infrastructures associated to the tourist sector remains unknown, in spite what has been said by those in charge of the project for the development of the Alqueva and the news propagated by the Media:

"They have been speaking about making in Mina da Orada as already has been made in other places, rural tourism and maybe with time build a hotel or something like that somewhere close... (...) I heard and read in some magazines and journals that a great development in the zone of Mina da Orada is expected but I do not know what is going to be made!... But, this was what I heard, I do not know if it will come true, I hope so... (...) Everything that comes to our parish concerning infrastructures of this nature is good..."



In the Riparian Village of Granja, the impact of the construction of the Alqueva Dam has a reduced expression, says the parish's president. The President, mainly, complains about the gap concerning the industrialization of his parish, which is an important factor for job creation, in his opinion:

“Well, the dam will bring benefits, right? ... Up to now they are very little or nonexistent, right? ... (...) Nowadays, the agriculture is paralyzed, primarily here in Alentejo, mostly regarding small agricultures... Therefore, we are in a desperate need of industry... The illusion was produced that the Alqueva Dam would create, almost immediately, many jobs... Unfortunately, this has yet to happened, right? ... The dam is working over 4 years now, is it not? And the jobs created are very little, comparing with what was promised when the project for the dam was made, right? ... In spite the fact that the dam has already been filled close to its maximum quota, no industry has been created and the work ranks are few...”

The President of Granja parish underlines that some projects involving his parish are been considered although this takes a considerable amount of time:

“So, the idea that I have of all this process is that it will bring development, right? ... (...) There are some projects, as I said before, right? Concerning Granja there are those who advanced with the idea of constructing a resort... I also have knowledge of national and international groups that already looked for land here in order to plant olives, but that they also want to, make Nature tourism activities... And so things advance very slowly, don't they? ...”

However, the President of Granja parish admits that the construction of the dam brought some benefits to his parish in terms of accessibilities, but some roads have not yet been repaired:



“The dam brought some improvements but much less than what was expected, right?... I am referring to roads and accessibilities... They were improved, even though this was not a very significant improvement, and not the one that we desired because there are some extremely negative aspects regarding the accessibilities to this parish... There are other roads that should have been improved, right? ...”

Another improvement pointed out by the President of Granja parish resulting from the Alqueva Dam, respects to the acceleration provoked in the construction of the new Station for Residual Water Treatment. In fact, the parish of Granja was deprived of a Station for Residual Water Treatment by the floods of 1997 and the President of the parish states that the construction of the Alqueva Dam accelerated the installation of the new one:

“Unfortunately, we have a lot of sewers of domestic use being lunched to the river without any treatment for 9 years, what it is madness... Inclusively, still today they are being lunched to the Great Lake, even though the Station for Residual Water Treatment has been concluded a few days ago... Therefore, this infrastructure is not yet functioning... It will start functioning, but it is not working yet... This Station for Residual Water Treatment, I am entirely sure that if it was not for the dam and the complaint that started to be made, I do not think that founding or investors, even with the incentive of the European funds, would want to do it... Because the City Hall has not enough financial resources for the development of such infra-structures...”

It is of note that in the Riparian Village of Granja none of the activities integrated in the Urban Requalification Project has started, with exception of the small improvements in the accessibilities:

“EDIA did not bring anything to this parish... (With higher verbal impetus) Zero... Zero... Inclusive, as I said before, it was responsible for making a picnic park, new sanitary, but it did not... Concerning roads



inside the village zero... Here in Granja, nothing... Nothing, nothing... (...)... As I said only the accessibilities are much better... ”

Relatively to the parish of Juromenha, its President understands that the Alqueva Dam has been the motor force for his village development, especially in virtue of the projects already in course destined to construct a resort, to restore the fortress of Juromenha and to create a golf field and other sportive equipments:

“At present it is already possible to visualize this development, even though things are not well defined in terms of strategies of Alqueva project and everything... However, today in Juromenha, in the parish of de Nossa Senhora do Loreto the development is already visible... We already have some projects, some things have already started and in the future we will have more development here, a great development in Juromenha and we are thankful to the Alqueva Dam for that... If it was not for Alqueva Dam we would not have these projects that are destined for Juromenha. Therefore, without a doubt the dam was a beneficial thing for us... (...) Let us say that we have one project in a very advanced phase of execution, at this moment, next to the Dam, in limit of the riverbed of Alqueva ... This project consists on houses for tourism, resort, in the village connected, to the European tourism network... We also have, in this same project a restaurant next to the edge of the river and a marina for 40 boats... Furthermore, we have another project already approved, that consists in the renewal of the Fortress of Juromenha... This project is not purely a tourist project but also residential, because half of the habitations that will be constructed inside the fortress will be for tourists and the other half will be rented to those who want to come back and live inside the Fortress as already happened some other times, right?... Associated to this project we have the construction of a golf field and other sportive infra-structures such as a football field, Tennis court, swimming pools and more... Thus, this project has not only a tourist dimension but also a sportive and leisure dimension...”



An important promise broke by EDIA was the not reconstruction of the sportive fishing track. However, the President of Juromenha parish affirms that the two entities are negotiating agreements for the development of the sports and leisure activities in of the parish:

“I can say that many things that had been accorded between us and the EDIA were not made.... I am a little bit, lets say, I was a little bit unmotivated with EDIA, because of these questions on which we had agreed and that did not materialize, mainly those used to bring many people here in the weekends, like sportive fishing... We had a track for sportive fishing that was taken from us when the dam was filled, and they had promised a new one for us but up to now it was not built... highly unmotivated, with this situation, but let us say that after, taking off this situation, let me say that all the rest has been beneficial... Let me say that we have had several meetings, have been attempting to reach agreements, concerning sporting and leisure activities in the surroundings of the dam, in fact things are going well, we have had plenty people here making these activities... concerning this issues everything is going very well... Lets say that between us and EDIA things have gone well for both sides...”

Furthermore, it is expected that the parish of Juromenha will be contemplated in the area of influence of the irrigated land plan:

“There are farmers that are going to make or already made projects... And I think that they are going to be favoured, honoured let us say, for this possibility... Ah, therefore, there is a large area, even though the parish is small, but it has some dimension of agricultural land, and there are some people who already made projects and will benefit with this irrigated land... Therefore, what we have today on the table will be, basically, more touristic projects.... Besides the irrigated land project is just starting, giving its first steps... Therefore, I think that if the irrigated land is contemplated, as it is being thought of, it will fulfil its benefits for the population of the parish and we will see the parish as an all...”



In the parish of Monte do Trigo, the construction of the Alqueva Dam has not been constituted as a development engine until the present date. In reality, its President states that as far as his parish is concerned no great enterprises have been programmed:

“Look, we, in Monte do Trigo, concerning the Alqueva, do not perspective great alterations... We in this village, as I said, have not, yet, seen great alterations... We were considered a Riparian Village further away from the Alqueva... The Alqueva passes right in our door step maybe just a kilometre away, right? ... It was foreseen, I do not know if it still continues, therefore, the objective of those who have these responsibilities, to make a marina here, right?... That is to be built in a very close property... If this will happen or not, we do not know... It is clear that this could also bring some development here... Therefore, the entrance of people and the exit of people to enter the Alqueva... If this project will go forward like it was foreseen or is foreseen, I do not know how it is, we are not going to have here (hesitating)... (...) (Mentioning to the fact that it not foreseen the realization of great projects in the parish) No... Here in our zone it is not being thought of... That I know, these enterprises are not thought of...”

However, the parish’s President detaches some benefits verified in Riparian Village of Monte do Trigo recurrent from the Program of Urban Requalification developed by Gestalqueva:

“We benefited a little here, the parish benefited by being a Riparian Village, the project of EDIA for these villages was the requalification of some spaces. It brought some order for the parish... This brought us that benefit... This project has yet to be finished, but in the end, these three Riparian Villages from Portel Municipality, which are Alqueva, Amieira and Monte do Trigo... Concerning all this things have improved a little...”



On the other hand, the President denounces the actual damages caused by EDIA in some roads and houses in Monte do Trigo parish during the construction of infrastructures associates to the Alqueva Dam. Up to this moment nothing has been made by EDIA in order to repair or compensate such damages:

“We have here, for example, the destruction of a road that linked our village to many others which now is impossible to use... Until today no intervention was made here... Therefore, they made the dam, went away and that remained destroyed... No satisfaction was given to parish. When will it be reconstructed or how long it will remain like that I do not know... On the other hand we have a house here where the owner spent a great amount of money from Switzerland... (...) The passing of trucks damaged this house... (...) It was seriously damaged; it is a pile of garbage ... The walls cracked and everything... The trucks were constantly passing through, because the house is next to the road, right? ... (...) We already went to Beja twice and it was impossible to contact anybody because no one was there to answer and take care of the situation which is a house that is located in the area where the lake was made. Now the owner is waiting to see if EDIA itself helps to resolve the situation because the man alone, poor man, right? ... The house was ruined by them...”

Finally, the President of Monte do Trigo parish, expresses its unpleasantness for the fact that the parish does not have a Station for Residual Water Treatment, nor is it yet set, at least a date to initiate its construction. In the understanding of the President, the construction of the Station for Residual Water Treatment is the first priority for this parish:

“We have situations here that are not admissible... Our sewers run for the river... They run 400 meters away from the walls of the parish... We will always sense their smell here... Because, unfortunately, we do not have a Station for Residual Water Treatment ... This was another bad thing that derived from Alqueva... These villages are taking water too Alqueva through its abrupt declivities, its rivers and so on, so the sewers



run towards Alqueva... The sewers of the parish... Still run directly for Alqueva, right? ... (...) For me, a Station for Residual Water Treatment is a priority here... For me, the number one priority is a Station for Residual Water Treatment ... I have sewers running 300 meters away from the village walls, right?... We cannot be there with the bad smell... In the summer, we cannot be there... The smell is horrible, right? ... (...) A Station for Residual Water Treatment, is going to be built here and in every other parish, right? ...”

All the parishes which had been affected by the construction of the Alqueva Dam saw a big or small extension of their surface be flooded with the run up of the water in the lake, but the parish of Luz was the only one where the village was affected. In fact, the village of Luz was reconstructed in another place. This displacement not only implied a change of residence place but of habits and the adaptation process is not yet concluded. The President also told us that during the new village construction there were psychologists to prepare people for the change but after the removal of residence no more psychological support was conceded. However, some support is needed and would be useful to local people even today.

“By moving the village, the habits changed... Therefore, this change was really, really, really complicated and the people have not yet adapted to this change after six years...”

In spite these difficulties the parish of Luz President considers that the Alqueva is a more value for Alentejo, however, so far the benefits did not meet the expectations.

“Naturally, I believe that the Alqueva infrastructures are an improvement for Alentejo and for the country... If it was not so, I would not have spent 14 or 15 years in this project that I have always embraced and defended, defending my village and the people who live here... I also defended what I intended from Alqueva and what I wanted Alqueva to be, however, up to date, lets say that we do not have something concrete concerning improvements or good that Alqueva brought beyond the



construction of a new village and some agrarian restructuration that were much less than what was initially promised... But, this is for other reasons...”

All the process of displacement of the village of Luz needed to be negotiated. It went beyond the construction of the village. The agricultural area of the village was also dislocated and submitted to an organization:

“The village was object of an agrarian restructuration... Clearly in these things there are advantages and disadvantages... However, generally, I find that the project was taking into account a prosperous reality for the development of the parish... Nevertheless, as it was determined, and as it was intimately made it did not reach the main objectives of the land division... In fact, for example, (hesitating)... Nobody speaks of undoing what has already been done... This is just a criticism with concrete proves... I also say that everything that was projected has been fulfilled (hesitating)... By the way, not only the agrarian restructuration... But, we are speaking about the agrarian restructuration, if it had been fulfilled, we would be one of the parishes better prepared for the future and with the inconvenience, in absolute certainty, of a steady economy, a local economy capable of generate fruits... To generate fruits here inside of the parish, namely, receiving man power from other places... However, as it was not so determined, the success of this project was less than what was initially intended... Honestly, if by chance the things have been made, today (...) I would be saying we were well and that I had no complaints...”

Regarding the agricultural level the dry olive trees plantations were substituted by irrigated olive trees plantations. As well as 82 ha of vineyards were planted. Also here some of the commitments did not be materialize.

“We had here the remodelling of the existing olive trees plantation... Therefore, those people who had olive trees plantations, have



now started to leave dry olive trees plantation and getting irrigated olive trees plantations... At first it was said that this would be paid by the project and that we would receive something for the start of the plantations and for the loss of production... Later, we arrived at the conclusion that this was not so... We were told that the production would be significant and maybe there would be a significant cut which would justify the construction of an equipment to wash the olives before they went to the nearest oil-press. So when the olives leave the plantation the farmers would know the acidity degree it would provide. Before this became true I motivated people to stay. On my part I made everything possible so people would start making the plantation, right? After that, relatively to the construction of this equipment nothing has been done yet....”

One of the main critics was the fact that some of the commitments that had been assumed have not yet been materialized and there is some scepticism on the capability of them ever materializing.

“However, this was also not made... And, therefore, this is already one of the commitments that has not materialize up to now and, it seems to me, that the conditions for it to be made in a short period of time are not great... Moreover, it was object of a reward for the farmer, reward on the level of plantation of vineyard... Moreover, any person who had one hectare of land had right to one hectare of vineyard... That is, the person gave the land and the State, EDIA, paid (hesitating)... Or the Ministry of Agriculture paid (hesitating)... But, it was the Ministry of Agriculture, as it has part of the project of reinstallation of the village; it was EDIA who paid... EDIA, therefore, said that any person who had land was allowed to plant one hectare of vine... And thus it was... The vineyard plantation was made, although everything went wrong... It went really wrong... It was planted more or less three times... In the first year it was planted in June, in adverse climatic conditions... Because vine plantation should not be made in the summer (...) Of those 82 ha 70 or 75 ha were lost... After that a new plantation was made and of that about 30% was lost (...). Moreover, we were lead to think that with the promised 82 ha of vineyard it would be



a good idea to build a winery in the parish... Furthermore, with the construction of a winery here, we thought it would create new jobs, because it would be significant for the parish...however it will not be possible to build it.”

To sum up, it is verifiable that the opinion is unanimous in the matter that the Alqueva Dam is a “window of opportunities” for the development of Alentejo. However, concerning the benefits already felt the opinions diverge and only the Presidents of Monsaraz and Juromenha parishes are satisfied with the projects that are being created. In the remaining parishes the benefits are still reduced and inefficient to resolve the worst problem in the region – the deficit of employment. The parishes try to motivate local people to develop new projects and even they try to develop some cultural and sporting activities associated with the Great Lake in order to attract visitors and create some jobs in the region.

All the presidents agree that some progresses are visible only at the level of accessibilities, where there are clear improvements.

The construction of Stations for Residual Water Treatment was also speeded up in some parishes even though the all network has not yet been created.

The main critics are related with delays in the Urban Requalification Program in some of the Riparian Villages; delay in the elaboration of detail plans; delay in the implementation of commitments assumed between EDIA and the Parishes.

Many of the parishes would like to have benefited of more area of irrigated land, would like to have a better knowledge about the strategies of EDIA for the region, would like to see resolved its problems of water supply to the population.

3.2 The involvement of parishes in the development plan design

Concerning the relations of the parishes with the EDIA and Gestalqueva, the opinions vary between the Presidents who understand that the bond with the public entities that manage the enterprise of the Alqueva is weak, opposing themselves, simultaneously, to the approach of “*top- down*” referring to the decision making on the planning and development of the Great Lake (e.g. Campinho, Campo, Amieira and Póvoa de S. Miguel), the presidents that underline that the bond is healthy but lacks direct



contact with the parish (e.g. Pedrógão do Alentejo) or imperfections in the access to information (e.g. Alqueva), and the presidents who affirm that the relation is excellent and admit the search of their intrinsic ideas by the above-mentioned public entities (e.g. Monsaraz and Juromenha). One note of prominence for the Pias parish is that, around the year 2000, it saw the end of its relation of proximity with EDIA because this organism started to negotiate directly with the great proprietor of Mina da Orada that has objected the project for the requalification of this Riparian Village

Starting with the President of Campinho parish, which states that EDIA only enquired his opinion before the application of the Program of Urban Requalification of the Riparian Village:

“Within the development brought by the Dam, since I am President of the parish here, and I am already in my second mandate, I was heard only a small amount of times... We were heard in what respects the requalification of the village... At the time it was the Architect Vítor Campos, who was making Expo Park ... It was Expo Park that made the plan of requalification of the Riparian Villages ordered by EDIA... What we transmit were our intentions, what we were planning to construct and which were our priorities so we could originate what was intended, that was to make a safe bet in event organization... Requalification of the village, in order to prepare it, logistically, for these events, to receive a lot of people from out side the village... (...) This was the only time that we were heard...”

Effectively, from that time on, the Campinho parish has been requested by EDIA to appear in meetings, only with the intention of transmitting decisions that were already taken and also to sign presence minutes:

“From then on we are convoked for anything, but things that were already determined... they hear us, but so they can mention that the parish was present... Our involvement was not allowed... It is not that we do not (hesitating)... We search and disturb... We decide things in our own way...”



But, they do not allow us great... In the decision plan, very little is allowed...”

The Campinho parish’s President opposes to all this process of decisions making and clearly states that a “*bottom-up*” approach is preferable, praising that it would be more prolific that the public entities, which manage the enterprise of the Alqueva Dam, inquired the desires and aspirations of the population of the Riparian Villages:

“Why should people come here and “Campinho has to have this... Campinho has to have that”? ... But, why? We do not know what we want? Our opinion does not count? Why do they have to impose things in our house? (...) It is not logic... People could come here and present the definition of the region, what are their thoughts for the region... What we would like to bet on, what funds are at our disposable and “what would you like?”... Thus, all is well... Now, “You have to have this. You take that”... It cannot be...”

It is underlined, finally, that the relationship between the City Hall of Reguengos de Monsaraz and the parish of Campinho was under, during some time, a hostile climate, because of the divergent political positions:

“(Referring to Campinho) Was a village that has not only forgotten... It was a little... It was marginalized by the City Hall... For a long time it was the only parish that was not socialist, right ... In being so the man did not make anything here in the village...”

The President of Campo parish states that he was convoked for meetings with EDIA, with some regularity, to discuss the problems that affected the Riparian Villages, up to the foundation of Gestalqueva, in the year of 2003. In the footpath of what the President of Campinho parish mentioned his homologous from Campo clearly states that his parish does not have capacity to get across its points of view in the decision making process for the Alqueva Region:



“Before being constituted Gestalqueva, we, sometimes were consulted in the meetings and thus we could speak of our difficulties... Now, there is too long that they last came looking for us... Therefore, the Presidents of the Riparian Villages practically do not have saying in anything...”

On the other hand, the Campos parish’s President refers the disagreements with the City Hall and Gestalqueva, namely, regarding the clarification of the scope of activities of both entities, circumstance that has delayed the construction of a picnic park in the area of the parish:

“I had this picnic park here next to the bridge, when you go to Amieira... (...) The owner of that land decided to make a picnic park there... We had that there... The City Hall says that who was to make the decision is Gestalqueva and Gestalqueva says that is the City Hall who was to give the order, that has that give the permit for that, and I do not know what!... This has been going on for years... The other day I decided to take action and wrote then a letter to them... To the two... (...) The President of Gestalqueva only purchases the tables and chairs if the City Hall takes the responsibility... He already sent me a letter saying “Advance with that”... But, the other one does not yet think that he has to... He already sent him a letter (the President of the City Hall to the one from Gestalqueva)... This has delayed all this process... It has been two or three years...”

As for the Monsaraz parish President, contrarily to the previous ones, he emphasizes that his ideas are always heard by EDIA and Gestalqueva, through the City Hall of Reguengos de Monsaraz. This President believes he is treated differently from his homologous by EDIA and Gestalqueva due to the importance of the historical cultural heritage of the parish. On the other side even in this parish the connexion is mainly established through the City Hall:

“This connection appears through the City Hall... City Hall has a seat in the meetings and, therefore, they transmit us what happens



(hesitating)... Here, at least, in the case of Monsaraz, I do not know if it is because of the importance that it has, they have this consideration...Also if they did not have that care I would look for it... We have the care of being kept up to date and of being heard as much as possible in everything...”

However, the President of Monsaraz parish recognizes that the institutional relationships between the remaining parishes of the Riparian Villages with EDIA and Gestalqueva are obviously weak and that the first ones do not have an effective participation in the processes of decision making:

“I leave here a criticism, I think that the connection, should be made in a much closer way... I see Gestalqueva and EDIA very distant from the parish, yes... Right now and I do not only speak for myself... I speak for my colleagues and the reality that I see... Because I am probably the one who has less to complain about... But, I see that, yes... That is the critic that I leave here... Because I have already told this to the responsible authorities... This proximity should mean the participation and integration of the parishes Administration in the processes where, in fact, important things are decided... Because the ones who take the first impact, when things are negative, are the parishes... And if they are not prepared on the information level for what is going to happen or if they do not have arguments... They can be against what is going to be done and what has been taught to them and they did not even have the chance of revealing against it... I think this is very negative and later it creates some distances between the populations and the entrepreneurs and all... The public entities that manage the Lake neighbourhood, which are EDIA and Gestalqueva... I think that they should be aware of this... This proximity would have been made... (...) I think that the parishes should have been called upon having a more active role, even a more important role... No... They were made basically obsolete... Things that appeared and were afterwards taught to the parishes, things that were already determined... That is my only criticism, is it not?...”



Logically, the relation between Monsaraz parish and the City Hall of Reguengos de Monsaraz is beneficial and prevails for the exchange and acceptance of ideas on both parts aiming for the development of the municipality:

“The parish has not the necessary autonomy for elaborate projects of such proportions so the collaboration of the City Hall is fundamental The territorial planning is a competence of the City Hall... (...) (Referring to the fact that some of his ideas were heard by the City Hall) Yes, yes, yes... Completely... This relation, in fact (hesitating)... Where, in many places, the private investment many times shocks with the interests of the populations and the interests of the parishes... We were lucky with the entrepreneurs here who developed or are developing great projects, because in the two cases (hesitating)... In one of the cases, we are now being heard... We have frequent colloquies... They ask our opinions... They respect our rules... In the other more advanced case where this entire situation has already been exceeded, the exact same thing happened... There was a great proximity between the City Hall and the parish and private investors... (...) The relationship is very good...”

The President of Alqueva parish, as previously stated, keeps a close and cordial relation with EDIA and Gestalqueva, even though he demands for one “*light of hope*”, using his own words, from the two public entities that manage the enterprise of the Alqueva, and he launches some criticism to the form of acting of both and to the gaps in the access to information on the part of the parishes:

“I cannot speak with the Gentleman responsible of lands of the Great Lake and say:

-“So, are we going to have a camping, thus having some touristic infrastructures?”

(Reproducing an eventual reply of the responsible for EDIA and/or Gestalqueva) -“But, Mr. President [parish President] we still have to see what will happen to that passage and this and that as well” ...



“What, so to speak, is nothing ... That is we get up from the secretary and say “That should be there”... We take note and advance... It will not advance in January, but it will in February... (...) I have to work based on nothing, waiting for information from God knows where.”

In a situation of some privilege, probably due to being the Riparian Village closer to the Dam and the one that gave the name to it, the parish of Alqueva already had the visit of high figures of the Portuguese State, among them the former Prime Minister António Guterres, occasion used by the President of the parish to request a small bus to support the Community Centre of Alqueva to the head of the Government:

“One time I was interviewed by the TV-first channel when our Prime Minister was António Guterres... We were on the wall of the Dam... It was when he saw perfectly that Alqueva was here and gave the name to the Dam... I said to the Prime Minister that the people of Alqueva would like to know the Prime Minister of Portugal... He saw that I had something else to tell him and I said “Prime Minister, lets go then”... (...) All the Media was here... We came of the Dam in a rush and the Prime Minister drunk a coffee with me, we finished saying that I was to be congratulated that I was in a developing land... And I am still waiting for this... But, I am very courageous, therefore, I have a lot more consumptions, I asked then the Prime Minister of Portugal if the Community Centre, where we have our elderly, and, at the time, I asked the Prime Minister for a little bus for the Community Centre... When the Secretary of State came here to put the inauguration, you know... I had the courage to ask about the bus for the Community Centre...But, always with a smile...”

The President of Pedrógão do Alentejo parish alleges that the relationship with EDIA and Gestalqueva is healthy; however the scope of the abilities for each entity is not well defined:



“So, sometimes we think that EDIA is the one responsible... We thought, sometimes... “No, that is not our problem, you have to take that to Gestalqueva”... So, there is where we are informed... Every now and then, some one from EDIA comes here... People think that EDIA is the owner of everything, but it is not so anymore... It used to be... (...) So we, sometimes, do not know to whom we should ask this and that ... And they are always very nice, right? ...”

On the other hand, this President leaves some repairs relatively to the question of the access to information regarding the planning and development of the municipality, concerning political disagreement with the City Hall of Vidigueira:

“(Concerning the access to information on the development project for the region) Sometimes there are some difficulties... Do you know why? Because politics, when the City Hall has not the same political filiations as the parishes, and this is the reality, sometimes we have to make some research... Some things came to our knowledge through the Media, they do not let anything pass... As the Beja Airport, or the Alqueva or Pedrógão Dams ... Or EDP, that produces energy here... Clearly, they divulge this information... Also, EDIA sometimes sends that information... I was told this by EDIA now when the contract with EDP was signed... Therefore, when it started to manage the waters from Alqueva... We had this information...”

Equally, the President Pedrógão do Alentejo parish disapproves, in some way, the proceedings of EDIA, specially the lack of direct contact with the parishes:

“On that part, the only thing... I have been here for three years and the only people who came here were two engineers (two engineers of EDIA I have to say) because of... How should I explain? So, we are here, and we ask for support in order to make candidacies with local organizations...”



In what concerns Amieira parish, the President assumes a critical position regarding the method used for decision making which is “*top-down*” which deprives, completely, the parishes of manifesting themselves regarding development projects. This President enumerates a series of promises made to the parish of Amieira by EDIA that have not yet been materialized, namely, the reconstruction of a picnic park, the availability of a transportation mean for the inhabitants to dislocate to the cemetery which is now further away, the reorganization of the old free system of water supply by means of wells and the maintenance of the garden of the circular place:

“(Referring to the “top-down” logic which characterizes the relationship with EDIA and Gestalqueva) Clearly... Clearly... They do not hear us... If I say that I want something made in a certain way, they go and make it the other way around (laughs)... Everything that is made here, we have no saying in it... That’s how it is, when the Dam (hesitating)... We had a picnic park near Degebe river... The Dam was filled 5 years ago and EDIA promised to reconstruct that picnic park... Do you think they did it? Of course not.... I have already sent, probably, 10 or 15 letters to the President and I did not obtain any answer, on these questions and others... (...) Even the owner of the land where it was to be built was available to give this help... No, but if we are the ones saying this, no... If they are the ones deciding that it should be there, everything is ok... Therefore, this is how things function here... Amieira is located far from the cemetery... We were 2 km away from the cemetery and now the distance increased to 5 km... EDIA promised to arrange transportation so people could dislocate to the cemetery. Currently, the widowers go to the cemetery... The female widowers pay the taxi to go there and EDIA promised a transport for these people, a small bus... Nothing... We had water that came here and supplied Amieira for free... So, it came from some wells that we had there... With the Dam, all that area was submerged, so... When the dam was constructed we were able obtained permeation so that a pipe could be inserted in one of the bridge’s pillar, and the water, and now there is a water point there before the bridge.. Therefore, this water was to come for free to Amieira... Nothing was made... It is there, but it is still far from the parish... Everything is the same... The entrance of the parish is



the same thing... Now, they are making something because of next week festivities... They are not going to make anything there... Next year, one week before the festivities here they come again... The garden in the circular place was full of grass... I went and put the tractor there... The other day, they came here saying that it is their circular place and we cannot put anything in it... Then, they should take care of it... But, they do not take care of it... The grass is there again... Any day (laughs)... Really... We wanted, and we already had some old stones to decorate the circular place... It cannot be, because the law changed and now we cannot put monuments in circular places... Just some grass or small bushes because of the accidents... Then, make something... But, they do not make anything... Honestly, I do not know what EDIA is doing here... EDIA does not make anything here... It made the big infrastructure and nothing else... The remaining portion of what was agreed nothing was made, simply nothing....”

About Gestalqueva, the opinion of the Amieira President also states that this entity denotes inertia and constituted a pure example of bad management:

“I do not know what is Gestalqueva ... What is Gestalqueva? Nothing... Nothing... They do not make a thing... I still have not seen anything made by them... But, what has made by Gestalqueva? Gestalqueva made this? It did not... It exists for 4 or 5 years now... It has 5 or 6 employees, each one with his one car... And that is it... The money that goes into Gestalqueva is for their salaries and... Is it not?... It is more than seen... That is how it is... Badly managed... That is nothing...”

The President of the Póvoa de São Miguel parish, agrees with his homologous of Campinho, Campo and Amieira, and emphasizes the distancing and indifference of EDIA relatively to the Riparian Villages, arguing that, at the present moment, the focus of interest of that organism is the general irrigation system:



“As it can be seen at this moment does not exist any kind of dialogue... In what concerns the contacts between EDIA and the Riparian Villages all I can say is that I asked for a meeting with them over a year ago and I am still waiting for an answer ... Therefore, I use to say to the chairman of the board of the administration, EDIA had obtained what she wanted that is the dam... They have what they wanted and now all they worry about is the irrigation canals... The EDIA is very distant from the Riparian Villages... It is completely distant from us... I think that it has no justification, but...”

The President of Póvoa de São Miguel parish requests a larger proximity and dialogue opening on the part of EDIA and the Riparian Village, in order to increase the investments in the region:

“Clearly, I feel that we deserved a little more attention... I think the sixteen Riparian Villages were the ones that contributed with their lands so that the dam could be as it is now... It can bring us benefits, I believe it can... Now, there are things that have to do... Now, some things have to be talked about, and so it would be in the interest of all that certain things (hesitating)... Great enterprises, small things that can transform the region into a more pleasant one...”

The parish of Pias' President, where the Riparian Villages of Mina da Orada is located, emphasizes that he kept a very close relation with EDIA and had meetings regularly with its responsible until about year 2000. However, from this date on EDIA cut all relations with the parish of Pias, presumably, because they start making direct contact with the most important owner of Mina da Orada who has created some obstacles to the requalification project of this Riparian Village and are negotiating with him directly:

“EDIA has always informed us of everything, more the City Hall, because we maintain more contact anyway... I also went to many meetings with EDIA concerning the Riparian Village of Mina da Orada... and I always went to meetings... But, lately I stopped going...”



They use to invite me... I do not know if they stopped making those meetings so that I could give my opinion... (...) We still had many lunches... We used to have the meeting in the morning and after we would have lunch... EDIA paid for the lunch and after that we would return to meeting again... This happened many times, but now I stopped going to the meetings, because, I find that EDIA after developing all that part of the villages closer to the dam, disconnect a bit from the parish of Pias. I do not know why, but later they arranged the contact of a gentleman there... The meetings that I had with them were just in the beginning up to 1999 or 2000 maybe... Now the meetings stopped because of that gentleman... (...) I find that it was that the reason why they stopped contacting the Pias parish..."

The Pias parish President feels helpless about this situation created by the most important owner of Mina da Orada, and, therefore, his intervention in the village is limited to give orders for the evacuation of the garbage and to guarantee the water supply to the inhabitants of this Riparian Village:

"As I said to you, [Mina da Orada] belongs to the parish of Pias, but I cannot give any orders there. The only thing that I can do is order to remove the garbage, leave there barrels so that people can supply themselves with water and nothing else... There is nothing else we can do, at this moment... Therefore, everything there is his... We cannot develop something if it is not the will of the owner... The one that had the most to gain from it was him... That is in its last breath, because a person arrives there and it seems a dead village..."

The President of Granja parish states that there is a relation of proximity between the institution that he runs and EDIA, having met in some occasions, inclusively, with the Dr. Henrique Troncho, the present Chairman of the Administration Board of that organization. However, the Granja's President emphasises that some of his homologous from other Riparian Villages systematically miss these meetings convoked by EDIA, fact that diminishes the demanding power of the parishes:



“That is the reason why EDIA was here, I mean, she played with the populations because knew that people (hesitating)... EDIA convoked the people for meetings and the people did not appear, the responsible entities... I have documents which prove that in more than 80% of the meetings the Presidents of the parishes of the Riparian Villages, as they call it now, where convoked and they were not present... Now, when the situation inherent to these spaces is argued, if the representatives are not present, that is clearly good for the other part... Nothing is demanded, nothing to say... And is good for them...”

Still about their relationship with the EDIA, the Granja’s parish President mentions a series of promises made by EDIA that had not been fulfilled up to the present, among which are the construction of a Picnic Park and Sanitary, and the improvement of the accesses:

“I can tell you that EDIA promised to make a picnic park here, that was seven years ago and still nothing... This was agreed on the first revision of the plan for the lakes of the Alqueva and Pedrógão, that is another parish... It assumed the responsibility to make better accesses to this parish, to make new sanitary... Nothing has been done... I already had a meeting with the Dr. Henrique Troncho, who is the President of EDIA, and he told me at a certain point that the budget of EDIA was very tight and he would be happy if they were able to pay the staff... EDIA right now is nothing but a mirage... Making any investment is going to be very difficult... Very difficult nowadays...”

Juromenha’s parish President disclosed to have a cordial relation with the EDIA, and so he has been present in some meetings promoted by that institution in order to establish agreements for increment sporting and leisure areas as was already mentioned. Furthermore, basing on the contacts that he had with the representatives of EDIA during the work meetings, Juromenha’s President believes that this institution did not have in mind a global strategy for the development of the region:



“Well, let me say that it was a time that (hesitating)... Let us say that a lot of people pass through EDIA.... A lot of people have passed through EDIA, the work groups that visited us the last time... (...) Honestly, when evaluating it all I find that they did not have a global definition of what could be done in the region of the Great Lake of Alqueva... Inside the different groups there were some people that had ideas and will to advance, but they gave up in the end, because... That person or those people, probably, are not in EDIA or Gestalqueva anymore, right? I think that most people who visited us did not have global strategy ideas for Alqueva, right?”

Moreover, the infrastructures associated with the Alqueva Dam that are being constructed in the parish of Juromenha are built by private groups and not by EDIA. In addition, once the projects have already been approved and that EDIA does not have any responsibility of making the investments, the relationship between Juromenha’ parish and the cited organism remains pacific:

“Yes, I think that the strategy that EDIA had for Juromenha was overcome because... In the beginning they were going to make a series of investments in my parish... These investments, in any case, were not made by them, ended up not being made by them... They ended up being made by particulars, some will be made, are being made, others I do not know... Let me say that regarding infrastructures destined for this zone, we continue to have some disagreements with EDIA and in some of the meetings shock a little bit ones with the others, however, these things where overcome because they (hesitating)... As they are not the one who will make the infrastructures, but particulars, the projects are being approved, then everything is ok... So we do not intrude... At least I do not intrude... (...) So things between EDIA and us are very well as the one that is making the investments is a particular, and we are in good relations with the investor, so things are going well... So, things are working the best way possible...”



The Monte do Trigo parish' President criticizes the institutional relationship that he kept with EDIA. Effectively, EDIA limited itself to propose some ideas for the development projects for the region that have never been materialize:

“This is my lamentation. EDIA could have worked with us in a different way... Even regarding information, right?... I had a meeting with EDIA and the other members of the parishes within the infrastructures of the dam itself when they were still there... There were some ideas and projects for the development of the area but that was it ... (...) (Mentioning the fact the representatives of EDIA did not take into account the opinion of the parishes concerning the projects when that meeting took place.). Absolutely nothing... An information was given and we heard it, waiting with all that expectation of, at last, as it is natural, see some connection, right?... This is very disagreeable to us and brought problems to us inside the parish, you know, with all this work being done, right? ...”

Similarly, this President regrets the weak relation between his parish and the City Hall of Portel that also tends to impose its decisions ignoring the aspirations of Monte do Trigo parish. This circumstance, says the President, has a negative effect in the parish population:

“On the other hand, there is a lack of connection between hierarchic structure of the City Hall, right? The connection is in a way that does not allow us take any advantages that might be destined for all the parishes... Or be in the verge of election for things to be improved (...)... I feel the lack of people coming to Monte do Trigo to know what I would like to have, what the Alqueva has brought to us, what is that we are doing now, nobody came here to make this... On the other hand, the City Hall itself, right? ... Because the work that is being done in the parish, is disconnected from the relation City Hall/Parish... There is now knowledge... There is now knowledge... They do not ask the parish for our opinion, if this is what was foreseen, that is what will be done... (...) When something is made, that connection should exist between EDIA, the City



Hall, and the Junta of the Parish... But, it does not exist, it does not exist... Unfortunately, it does not exist... The result of this work is many times negative... It is negative for the populations, is negative for the image of the parishes...”

Concerning the displacement of the Luz Village the all process was articulated between the population of the parish and EDIA. The investments made by EDIA were elevated and a good understanding between institutions was created:

“I am here since 1994 and we intervene in the all process sometimes listening people from outside: “You should do this, see if it is ok this way” or “See what you can do”... And with a lot of imposition, we also achieved some of ours... We made ourselves heard, some compromises were made, if not it would have been terrible... But, we made same compromises and in other things our will has heard... We won for sure and we are better than we would have been if we had accepted the first project...”

After the displacement of the village everything became more complicated and the confidence level in the institutions has diminished:

“But that was prior to the displacement... After that (laughs)... “My friends now take care of yourselves”... This was what they thought and did... Besides before the displacement they were able to create divergences between the families, the population... And that was their propose as well, was not it? Divide and conquer... They were able to do that... We tried to stop it while we could...”

The failure to accomplish some of the established commitments, the tardiness in resolving certain problems and the lack of dialogue from EDIA diminished people confidence in the institutions and created a great disappointment in the population:



“We have conditions to leisure activities, horse riding routes, walks, circuits... We have a perfect setting for all that... If they will not do it, they should let us do it... Give us the conditions so that we can do it... If we cannot make everything at once, we will do it little by little... This is not life we continue (hesitating)... The President of EDIA says that they will have everything done by the end of the year... I do not know what he is referring to, right? He says that there are a lot of people visiting the museum, but we cannot survive we the visitors that came to the museum, right? It will not do, because the people that came to see the museum they come see the museum and go away again... We can make a living out of what every village; every town has which are the visitors that come and stays for a while, at least a few hours, not the ones that are just passing through...”

“Luz would disappear because Luz was unhappy... And Luz is unhappy and it has a very good reason for it, for what you promise you must keep... But up to this day this did not happen...”

Bring closer together the institutions from the communities: try to understand the local interests, inform the communities clearly are the basis for promoting an effective development.

“Contrarily, to what people thought, what EDIA technicians thought and to what State technicians thought, that the elderly would be the most reluctant ones to the displacement, they were not... I always say we would be worst after than before the displacement... Before the displacement we had psychologists and sociologists and everything else you can imagine... After the displacement all that was over... From then on... It should have been a psychologist here after the displacement... And there was not... It is shameful... A great part of the disillusion is due to the lack of attendance we deserved and were entitled to ...”



Each and every one of the Riparian Villages acts only in defence of their own interests. An attempt was made to create an association integrating all these villages. This attempt was unfruitful which decreased the persuasion power of the Riparian Villages:

“It was a good idea and I was one of those who tried to implement it... I mentioned it in two or three reunions to which we were called, the parish, mainly reunions with Gestalqueva, to which we were called to appear... Two or three reunions, but when they realised that together we might accomplish something...”

The authorities position is not always clear which increases the discontent and distrust of the populations and Juntas of the parishes in them:

“All I wanted from the City Hall of Mourão was their support when we were or are trying to obtain certain advantages... And that their “voice” was the same as ours... Because they are in favour of some things but not on everything... But what are they against, right?”

“A part from those 2 millions euros in investments which did not come true (hesitating)... The construction of the marina and a lot of other investments valued in more than 2.8 millions euros which were to be invested here and were not... We have no marina, no craftsmanship... I mean these were good projects that might bring development... And they promised us they would be done... I asked for nothing more than the marina... We did not ask for an agrarian restructuring, we did not ask for the vineyard, we did not ask for traditional crafts shops... We did not ask for any of these... We asked for something like this, but no this... Why did they promise this to us? Why did they come with projects that could not undertake?”



4. THE MANAGEMENT RESPONSIBILITIES OF THE COMPANY OF DEVELOPMENT AND INFRASTRUCTURES OF ALQUEVA

As we wrote before the Company of Development and Infrastructures of Alqueva, s.a. (EDIA) is an anonymous society of public capitals that was established in the year of 1995, by the Portuguese Government to conceive, construct and manage the Enterprise of Multiple Ends of Alqueva (EFMA). For the set of planned infrastructures and having as deadline the year of 2013, the foreseen investment is of about 2 300 Million Euros.

This company with headquarters in Beja intends to stimulate the economic, social and cultural development of most of the municipalities of Alentejo.

The main objective of EDIA is the planning, accomplishment and exploration Alqueva equipments.

The essential vectors of the strategic orientation of EDIA are substantiated by the diversification of business areas that consist, at this moment, the sectors of Waters, Renewable Energies, Tourism, Environment, Agriculture, and Innovation and Technology. At the same time, this company has the purpose to create partnerships in domains such as the production of bio-fuel, the production of wind and sun energy, the certification of agro-industrial products, water supply and treatment of urban solid residues, the environmental monitoring, tourism and territory management.

The EDIA participates in the social capital of several strategic companies for the development of the Alqueva project and the region, as Gestalqueva (51%), Waters of the Central Alentejo (5%), EDAB- Company for the Development of Beja Airport (1.25%), the ADRAL- Alentejo Regional Development Agency (4.11%), the COTR-Technology and Operative Centre of Irrigate Land (9%) and LUSOFUEL- Bio energies Production (9%).

In the case of Gestalqueva the remaining 49% are equitably distributed by the seven autarchies whose territory is closer to the Alqueva and Pedrógão Dams: Alandroal; Reguengos de Monsaraz; Mourão; Portel; Moura; Serpa and Vidigueira.

Gestalqueva is basically the concentration and share point between the Company and the responsible for the territory in what respects to the development of the tourist side of the project.



The EDIA keeps in its abilities all the attributions that had been in its founding to which new responsibilities had been added.

“As a matter of fact a significant alteration was made, even better, an addition of abilities to reinforce the concession contract celebrated with the Ministry of the Environment according to which the management of the hydrological public domain is of the responsibility of EFMA, respecting the water supply for agriculture and energy, which is now managed by EDIA.”

According to words of the current Chairman of EDIA' Administration Board the task of this company is difficult, long and is always creating new challenges.

“Is an arduous task having in account the dimension of this project and its calendar, initially programmed to be concluded in the year of 2025.

In this process there are no two equal moments, and new challenges are placed in each advance of the project. At the beginning, it was necessary to develop the studies that had lead to the founding of the Project and then the support of the European Union. Later it was the construction of the great Dam.

Now it is task of taking water from Alqueva to the places were it is lacking.

It is these different moments that brought us to the present without pauses.

The recent decision to anticipate the conclusion of the irrigation network from 2025 to 2013, speeded up the process in course.”

In the opinion of the Chairman of EDIA' Administration Board the Alqueva Dam is only one element of a project capable of dynamizing Alentejo:



“The Alqueva Dam is only one of the elements, the main one, of a vastest project than aims at, in last analysis, the multisectorial development of the region where it is inserted.

As a structural instrument, the Alqueva Dam harnesses a set of activities, some already visible, capable to contribute for a process of sustainable development not only of Alentejo, but also of the Country.

The mobilization around the Alqueva Dam is already an indestructible reality in sectors such as Agriculture, Energy and, also, Tourism.”

In view of the more-values already reached the Chairman of EDIA' Administration Board points out the confidence that the Project brought to the region creating new opportunities for its development.

“One of the more-values of the Alqueva project which was visible short after the start of the project was the confidence that it brought to the region. This confidence is translated in projects and intentions of investment that are now appearing all over the region.

It is from the water guarantee given by the Alqueva Dam that are constructed the foundations of a new process of economic development for the zone enclosed by this Infrastructure, starting for the Riparian Villages to which Alqueva is an opportunity of development that they cannot waste.”

Questioned on the pillars of intervention associated with the EFMA, the Chairman of EDIA' Administration Board reefers that due to the project dimension it is still early for an evaluation on the progresses of the project.

“I would not speak in axles of “lesser progress”, I would speak of a calendar of accomplishment of the Enterprise that, due to how time consuming the construction of infrastructures is, allows a gradual, but differentiated, development, of the activities included in the project. Let's



not forget them that project of Alqueva, as presently conceived, will be concluded in 2013, and then all its potentialities will be available. It is still early to talk about axes of great or minor progresses. Nevertheless, it is in the public water supply to the populations, in the implementation of the irrigated land and the production of non-polluting electric energy that the process is in a more advanced level of concretion.”

The impacts of the construction of the Alqueva Dam on the Riparian Villages, can be, firstly, evaluated by the alterations in the landscape and the way that each village benefits of the Great Lake that the Dam created. Now each village will have to use to its advantage to create advantages.

“The alterations are already visible in the villages that constitute the mesh surrounding Alqueva Dam, villages that, suddenly received a lake at its feet.

The particular characteristics of each one of them will dictate its future which without a doubt will be much better than the one they would have had without Alqueva.

This certainty equally applies to this entire region. “

The Chairman of EDIA’ Administration Board does not consider important to speak about the obstacles that the company has faced and prefers to speak about the challenges brought by the reduction in 12 years for the finalization of the project.

“The biggest challenge of Alqueva is time.

To reduce in 12 years the stated period for its implantation demands rigorous planning and a very demanding concretion and has situations that they do not depend only on the Company...”



The attributions of EDIA in the agricultural sector are limited to the creation of irrigation infrastructures and thus promoting the change in the agricultural production in Alentejo.

“EDIA is responsible for to the creation of conditions so that a new agriculture can be installed, that is, for the construction of the irrigation infrastructures that will allow the farmers to develop its activity based in practices of irrigated land.

The perception that I have, and that we all have, is that this new form of agriculture is already a reality in the Alentejo. It is enough to circulate in the main roads in the South of the Country to state this.

I believe that the Alentejo will be, in the next future, much more productive, rich and developed, where the opportunities are multiplied by the number of hectares that constitute the project.”

Relatively to the intervention of EDIA in the domain of tourism and in ambient and urban recovery of the Riparian Villages it should always be in the direction of trying to create conditions for the development.

“Neither EDIA nor Gestalqueva are direct promoters of tourism, our concern goes to the small population accumulations that, living in the margins of the Great Lake, should make the most of the infrastructures in Alqueva.

The interventions in these accumulations, that always appear in a strategy of urban and ambient valuation and for initiative of the autarchies, associated with Gestalqueva, aim at, in last instance, to create conditions so that the tourism development finds in these villages reasons to captivate visitors and to create local more-values.

It is a mid term strategy that has found return and shelter in the populations and autarchies.”

The attributions of EDIA in the management of the hydric resources aim at a sustainable approach.



“In respect to EDIA the management is being made having as base the protocol celebrated with the Ministry of the Environment trying to valorise and preserve resources in a pro active attitude in the defence of its quality.”

The Management Plan for the Alqueva Dam defined a perimeter of 500 m around the dam on which they intervene to guarantee its sustainable use.

“This perimeter is what it was defined in the Management Plan of the Alqueva and Pedrógão Dams. I remember that Alqueva was the first dam in Portugal to have a Management Plan before being constructed; making us at ease comfortable regarding the sustainable use of the involving area.

Furthermore, the Management Plan guarantees the sustainability of the interventions that might occur in the Alqueva and Pedrógão Dams.”

On the structure paper for the development of the region there is a large degree of complementarity between the great investment projects and the small investments projects developed by the local communities.

“A truly integrated development process should consist in complementarity and diversification as there is place for both.”

The “window of opportunities” created by the Alqueva Dam generates great opportunities for local agents in the region in very diverse sectors.

“Alqueva is an open window for new chances.

From agriculture to tourism, from the renewable energies to the agro-industries, practically all the economic activities find here ideal conditions to subsist.



The investments are appearing naturally either through local agents or agents from other regions.

The region, by itself, does not have the reply capacity to take advantage of all the opportunities. However, the objectives of Alqueva are these: to capture investments that help to develop the region, and the Country.”

Although there is little information on the private investment in the region EDIA considers that it is occurring at good rhythm.

“EDIA considers that all the productive investment, either national or foreign, is welcome and gladly it is happening at good rhythm.

EDIA does not have detailed information on the private investment up to date but I do not doubt that this public investment goes to potentiate the private investment, raising it to compatible levels with the development wanted for this region of the Country.”

Concerning the relationship between EDIA with the municipalities and parishes the Chairman of EDIA’ Administration Board states that:

“EDIA has kept very good relations with the 20 municipalities of its area of influence, where are included, of course, those whose territory confines with the Alqueva and Pedrógão Dams. Moreover, EDIA created Gestalqueva Company which unites the seven municipalities in the lakes created by these to dams.

EDIA also keeps very good relations with Spanish municipalities that are in the Alqueva area.

“The strategy was defined in dialogue and contribution with all the involved autarchies and no one is better suited for representing the interests of the local communities.”



The Chairman of EDIA' Administration Board considers that some municipalities are more privileged than other what respects to the development of investments. Which are the possible explanations for this?

“The Alqueva Enterprise was projected according very specific space logic that had for base the implantation of 110 thousand hectares of irrigated land.

It is clear that the reasons that presided over the selection of the areas to irrigate were environmental, economical and technical. It was not the intention of this project to take infrastructures to the entire Alqueva region.

The Alqueva Dam had to be constructed where it is, the canals had to tread a determinate passage, the irrigation networks had to benefit a definitive type of ground, a determined quota, etc. “



5. CONCLUSION

The direct and indirect impacts of the construction of the Alqueva Dam in the development of the region are still very limited for the most of the parishes close to the Great Lake.

However, hope is still in the people minds and expectations continue high as new investments could occur in a near future. Nevertheless, most people present a passive attitude and little motivation to look for investment opportunities. The comprehension of these behaviour motivations is very important, maybe the lack of awareness and information are determinants to explain the situation.

The Presidents of most parishes try to develop ideas to attract investments and events able to promote some demographic, social and economic dynamic. In other parishes the high cultural and natural heritage increases the attractiveness for private investments. The selling of houses and lands had increased and now the price is inflated as people want to earn a lot of money which is decreasing the sales of new properties.

Many Spanish companies have been buying agricultural land and the extension of olive plantation is increasing.

Until now the lack of jobs which is the worst problem in many of the parishes, is not yet solved. So young people do not find reasons to stay in the area and migrate to the main towns of Alentejo or even to foreign countries, increasing the aging process in Riparian Villages.

The parishes Presidents would like to invert the depopulation trend but most of them do not know what to do. There is a lack of information and support to allow the design and the development of projects proposals. The parishes where there are already private investments being done their disillusion related with the no concretization of the many commitments assumed by EDIA is not as important as it is when the parishes are waiting for the concretization of the EDIA promises because no other projects are known.

Possibly, the development strategy has been set thinking in attracting tourists to the region hoping that this on its own would solve the problem. Perhaps the focus of the development strategy should be looking for big agricultural and touristic projects. However, small and median projects maybe even more important for some of villages.

The involvement of local communities was very limited in the design of the development strategy and program. The parishes closer to the Alqueva Lake have different



environment and cultural heritage. It is not clear if the design of the development program had taken into account an integrate and global view of the area, trying to distribute benefits and complementarities between the different parishes.

From the interviews it is clear that EDIA had tried to define the development strategy in dialogue with all the population. However, this Company identifies the municipalities as the better level for representing the interests of the local communities. The parishes' involvement in the process was very low. The only exception was the Luz parish for well known reasons.

Moreover, sometimes maybe the parishes did not understand the importance of their engagement in the definition of the development strategy but it seems that their active involvement could not be desirable by other decision levels. Possibly, some disillusion with a process that since its beginnings was seen as the way to develop Alentejo might explain a lack interest of some parishes in the process. They recognize the small role attributed to them. So there are some communication and comprehension problems between the parishes and EDIA.

There was an intention to create an association of the Riparian Villages to improve their "voice" close to EDIA and Gestalqueva and also to increment complementary investments between the parishes. For several reasons this intention has not yet been concretised.

The parishes which are seeing new private investments in their territory do not have such a negative view of their relationships with EDIA and/or Gestalqueva because they are not dependent from the financial support of these institutions to create jobs and attract people.

It is evident that we have here two distinct logics:

- The company logic which is to prioritize the implementation of investments regulate by different factors, namely, financial. These options should be, in our opinion, clearly presented to the parishes and municipalities. Maybe the last ones have this information but the first ones do not have enough information.

- The Riparian Villages logic which pretends to resolve their development problems mainly related with a lack of jobs. The incapability to fulfil the commitments assumed by EDIA created a distrust and disillusion in the local communities. The parishes also revealed a deficit of information about the competencies of EDIA and Gestalqueva and awareness about the development strategy.



The relationship between Municipalities and Parishes, also, reflects conflicts in some cases, mostly explained by political divergences.

In our opinion more important than promoting development for the population is to engage population in the all process. If we can get a good engagement of the populations they can more easily understand the difficulties and help looking for solutions. In this situation the trust in institutions can be reinforced and the investment capacity can increase. Particularly, the process of construction of the new Luz Village reflects a bottom-up approach. It is a pity that not all the commitments assumed by EDIA have, up to now, been respected and we could not show the transfer of Luz village as a success model.

Maintaining the local communities well informed is very important in order to create opportunities for new investors. The availability of the information is, also, very important as well as the content of the message and the way it is spread. A better engagement of the parishes in all the process will be useful to promote a sustainable development for the region. To inform the parish and to ask them what they want for their communities would be a better strategy. The bottom-up approach is suggested.

As final remarks we suggest:

- A better information namely about the investment opportunities directed not only to big companies but also to small and median enterprises;
- Increase the awareness of population about the management of the development process;
- Reinforce the communities' engagement in all the process;
- Facilitate the access to information and simplify procedures;
- Minimize the politician-partisans divergences that affect the development options and the implementation of some projects.

A sustainable development demands an effective involvement of local communities. It is not possible do develop the Riparian Villages without knowing what they expected and how they can be involved .It is fundamental to motivate people to act and design a territory with identity. What gives Alqueva Region identity is not only the Great Lake, but the cultural landscape around it. Reinforce this relationship is the way to create sustainable development and effectively contribute to the development of the region.



6. Annex I: Questionnaire

Public opinions related with Alqueva Dam

This research takes part in the activities of “NeWater” - New Approaches to Adaptive Water Management under Uncertainty - Project, integrated in the 6th EU framework programme. The main aim of the NeWater Project is to develop a conceptual framework for research and adaptive management of river basins that integrates natural science, engineering and social science concepts and methodologies (<http://www.newater.info>).

This questionnaire intends to analyse the impact of the Alqueva Dam in the daily life of the local communities and in the land use changes.

None of your responses from the questionnaire will be identifiable to you in any research output nor will they be used to another end different from the one expressed.

Should you seek any additional information regarding this research, please do not hesitate to contact.

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Questionnaire

I – General information

1. How long have you lived in _____ (name of your suburb) _____ years
2. How long have you lived in your present house _____ years?
3. This is a secondary home? (please circle one) YES/NO
4. Do you own or rent this home? (please circle one) OWN/RENT
5. Do you have forest/agricultural properties? (please circle one or two) OWN/RENT



II – Personal opinions about the Alqueva Dam

1- In regard to understand what represents Alqueva Dam in your *daily life*, please describe the extent to which you agree or disagree with each of the following statements:

| | Once a week or more | A few times a month | Once a month | A few times a year | Rarely | Neve |
|---|------------------------|---------------------------|-----------------|--------------------------|--------|------|
| I think about the good things Alqueva Dam brought. | 6 | 5 | 4 | 3 | 2 | 1 |
| I think about the bad things Alqueva Dam brought. | 6 | 5 | 4 | 3 | 2 | 1 |
| I think about the times before the construction of the Alqueva Dam. | 6 | 5 | 4 | 3 | 2 | 1 |
| I think about future developments related with the Alqueva Dam. | 6 | 5 | 4 | 3 | 2 | 1 |

2- In regard to understand the general impacts of Alqueva Dam, please describe the extent to which you agree or disagree with each of the following statements:

| | Strongly agree | Agree | Neither agree Nor disagree | Disagree | Strongl disagre |
|---|-------------------|-------|-------------------------------|----------|--------------------|
| The Alqueva Dam improved life in my community. | 5 | 4 | 3 | 2 | 1 |
| The life conditions are better now. | 5 | 4 | 3 | 2 | 1 |
| The impacts of the Alqueva Dam will increase in future. | 5 | 4 | 3 | 2 | 1 |
| Most of the people in my community take benefits from the dam. | 5 | 4 | 3 | 2 | 1 |
| The water supply is better after the construction of the dam. | 5 | 4 | 3 | 2 | 1 |
| The agriculture income will increase with irrigation. | 5 | 4 | 3 | 2 | 1 |
| There is an increase of demand of agricultural lands. | 5 | 4 | 3 | 2 | 1 |
| There is an increase of demand of houses for touristic purposes. | 5 | 4 | 3 | 2 | 1 |
| The number of tourists increased in my community. | 5 | 4 | 3 | 2 | 1 |
| The number of foreign people is increasing in the region. | 5 | 4 | 3 | 2 | 1 |
| There are many people that come to the region only to see the Dam. | 5 | 4 | 3 | 2 | 1 |
| My expectations with the Alqueva Dam have been satisfied. | 5 | 4 | 3 | 2 | 1 |
| The Alqueva Dam brings more animation to the region. | 5 | 4 | 3 | 2 | 1 |
| After Alqueva Dam there are more cultural events. | 5 | 4 | 3 | 2 | 1 |
| The Alqueva Dam is an essential infra-structure for the economic development of Alentejo. | 5 | 4 | 3 | 2 | 1 |
| The Alqueva Dam is a motive of proud for the region. | 5 | 4 | 3 | 2 | 1 |
| Most of the investments are implemented by large companies. | 5 | 4 | 3 | 2 | 1 |
| Most of the investments are made by people that are not from the community. | 5 | 4 | 3 | 2 | 1 |



3- In your opinion, which are the main goals of the Alqueva Dam? (Indicate only three options)

- Irrigate agricultural lands (1)
- Water supply to the communities (2)
- Build the largest artificial lake of Europe..... (3)
- Improve tourism (4)
- Create jobs..... (5)
- Create a strategic water reserve (6)
- Create golf courts (7)
- Produce electricity..... (8)
- Develop the region (9)

4- Please indicate which are the two words that could better describe what the Alqueva Dam means to you?

5- In regard to understand your position about the political decision to build the dam, please describe the extent to which you agree or disagree with each of the following statements:

| | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
|---|-------------------|-------|----------------------------------|----------|----------------------|
| I remember when the political decision to build the dam took place. | 5 | 4 | 3 | 2 | 1 |
| The political decision to make the dam take several years. | 5 | 4 | 3 | 2 | 1 |
| I was sceptic in relation to the construction of the dam since I began to hear about it. | 5 | 4 | 3 | 2 | 1 |
| The decision to build the dam was very discussed with the local populations. | 5 | 4 | 3 | 2 | 1 |
| The local authorities promote public discussions to inform populations. | 5 | 4 | 3 | 2 | 1 |
| I had got lots of information in the local newspaper, radio and television at that time. | 5 | 4 | 3 | 2 | 1 |
| The localisation of the dam is inappropriate. | 5 | 4 | 3 | 2 | 1 |
| I discussed a lot with my friends and neighbours about the decision to build the dam. | 5 | 4 | 3 | 2 | 1 |
| Most of the people in my community agreed with the construction of the dam. | 5 | 4 | 3 | 2 | 1 |
| Since the first time I saw Alqueva Dam as an opportunity of development. | 5 | 4 | 3 | 2 | 1 |



6- In regard with the construction of the dam, please describe the extent to which you agree or disagree with each of the following statements:

| | Strongly agree | Agree | Neither agree Nor disagree | Disagree | Strongly disagree |
|--|----------------|-------|----------------------------|----------|-------------------|
| I remember what happened during the construction of the dam. | 5 | 4 | 3 | 2 | 1 |
| During the construction of the dam many jobs were created for local people. | 5 | 4 | 3 | 2 | 1 |
| The construction of the dam employed many people from outside the region. | 5 | 4 | 3 | 2 | 1 |
| I participated in the construction of the Alqueva Dam. | 5 | 4 | 3 | 2 | 1 |
| During the construction of the dam the insecurity increased. | 5 | 4 | 3 | 2 | 1 |
| The construction of the dam took too long. | 5 | 4 | 3 | 2 | 1 |
| I have bad memories about the period of construction of Alqueva Dam. | 5 | 4 | 3 | 2 | 1 |
| The long process between the political decision and the conclusion of the dam disturbed very much local people's life. | 5 | 4 | 3 | 2 | 1 |
| The political decision to decrease the lagoon's quota was appropriated. | 5 | 4 | 3 | 2 | 1 |
| The Alqueva Dam construction must be done a decade before. | 5 | 4 | 3 | 2 | 1 |

7- In regard with the direct impacts of the dam in the real state, please describe the extent to which you agree or disagree with each of the following statements:

| | Strongly agree | Agree | Neither agree Nor disagree | Disagree | Strongly disagree |
|--|----------------|-------|----------------------------|----------|-------------------|
| I had properties which were flooded. | 5 | 4 | 3 | 2 | 1 |
| I had to leave my house which had been flooded. | 5 | 4 | 3 | 2 | 1 |
| The financial compensation I received it was adequate. | 5 | 4 | 3 | 2 | 1 |
| My new home is better than the old one. | 5 | 4 | 3 | 2 | 1 |
| I would prefer to stay in the old village. | 5 | 4 | 3 | 2 | 1 |
| The irrigation's plan promoted by Alqueva Dam benefits my properties. | 5 | 4 | 3 | 2 | 1 |
| The irrigation's plan will be very important to the development of the area. | 5 | 4 | 3 | 2 | 1 |
| I agree to do myself the works to get water into my properties. | 5 | 4 | 3 | 2 | 1 |
| I intend to use irrigation in my agricultural lands. | 5 | 4 | 3 | 2 | 1 |
| With irrigation I change the kind of agricultural production. | 5 | 4 | 3 | 2 | 1 |
| It will be difficult to use irrigation because it is to expensive and I can not do the investment. | 5 | 4 | 3 | 2 | 1 |
| It will be difficult to use irrigation because my agricultural lands are much dispersed. | 5 | 4 | 3 | 2 | 1 |



8- In regard with the impacts of the dam in the livelihood, please describe the extent to which you agree or disagree with each of the following statements:

| | Strongly agree | Agree | Neither agree Nor disagree | Disagree | Strongly disagree |
|--|----------------|-------|----------------------------|----------|-------------------|
| Thanks to the dam I created a new business. | 5 | 4 | 3 | 2 | 1 |
| Thanks to the dam I change my profession. | 5 | 4 | 3 | 2 | 1 |
| I am thinking to create a new business related with the Alqueva Dam opportunities. | 5 | 4 | 3 | 2 | 1 |
| The dam creates opportunities for some of my friends and family. | 5 | 4 | 3 | 2 | 1 |
| My income increased because Alqueva Dam. | 5 | 4 | 3 | 2 | 1 |
| My quality of life increased. | 5 | 4 | 3 | 2 | 1 |
| The construction of the dam changed the life of my family. | 5 | 4 | 3 | 2 | 1 |
| I think my community is a good place to live. | 5 | 4 | 3 | 2 | 1 |
| There are new people living in my community. | 5 | 4 | 3 | 2 | 1 |
| In my community new infra-structures have been created. | 5 | 4 | 3 | 2 | 1 |
| I use the infra-structures created by the dam for my leisure. | 5 | 4 | 3 | 2 | 1 |
| Alqueva Dam changes my daily life. | 5 | 4 | 3 | 2 | 1 |
| After the construction of Alqueva Dam I have more social contacts. | 5 | 4 | 3 | 2 | 1 |
| I adopted a more modern way of living after the construction of Alqueva Dam. | 5 | 4 | 3 | 2 | 1 |
| I am afraid that the traditional rural life will change a lot. | 5 | 4 | 3 | 2 | 1 |

9- In regard to understand the importance of people's opinion in the local political options, please describe the extent to which you agree or disagree with each of the following statements:

| | Strongly agree | Agree | Neither agree Nor disagree | Disagree | Strongly disagree |
|---|----------------|-------|----------------------------|----------|-------------------|
| The opinion of citizens is important to influence the local political options/decisions in the region. | 5 | 4 | 3 | 2 | 1 |
| The local authorities try to know the local communities opinion and aspirations to define the development strategy for the region. | 5 | 4 | 3 | 2 | 1 |
| The local authorities try to satisfy the communities' interests. | 5 | 4 | 3 | 2 | 1 |
| The decisions made by the local authorities about the Alqueva Region development leave me satisfied. | 5 | 4 | 3 | 2 | 1 |
| The dialogue between local population and local political authorities never has been tense. | 5 | 4 | 3 | 2 | 1 |
| The dialogue between local population and the government concerning decisions related with the Alqueva dam never has been tense. | 5 | 4 | 3 | 2 | 1 |
| Local environmental associations have been important to defend the communities' interest close to the local authorities and the government. | 5 | 4 | 3 | 2 | 1 |



10- In regard with the information about the investment opportunities, please describe the extent to which you agree or disagree with each of the following statements:

| | Strongly agree | Agree | Neither agree Nor disagree | Disagree | Strongly disagree |
|---|----------------|-------|----------------------------|----------|-------------------|
| I try to be informed about the progress associated with Alqueva Dam. | 5 | 4 | 3 | 2 | 1 |
| It's difficult to find information about the opportunities of investments planned for the region. | 5 | 4 | 3 | 2 | 1 |
| I know how to get information about the possibilities of investments. | 5 | 4 | 3 | 2 | 1 |
| The local authorities try to maintain the population informed about the opportunities of investments. | 5 | 4 | 3 | 2 | 1 |

11- Thinking about the information you want to have about the impacts of Alqueva Dam how reliable the following forms of media are in your opinion: (from 1 = very reliable to 5 = not at all reliable) (please circle one per line)

| | Very reliable | | | | Not at all reliable |
|------------------------|---------------|---|---|---|---------------------|
| Newspapers | 5 | 4 | 3 | 2 | 1 |
| Television | 5 | 4 | 3 | 2 | 1 |
| Radio | 5 | 4 | 3 | 2 | 1 |
| The local authorities | 5 | 4 | 3 | 2 | 1 |
| Associations | 5 | 4 | 3 | 2 | 1 |
| Friends | 5 | 4 | 3 | 2 | 1 |
| Internet | 5 | 4 | 3 | 2 | 1 |
| Other (Specify: _____) | 5 | 4 | 3 | 2 | 1 |

12. In regard with the impacts of the dam in the landscape please describe the extent to which you agree or disagree with each of the following statements:

| | Strongly agree | Agree | Neither agree Nor disagree | Disagree | Strongly disagree |
|---|----------------|-------|----------------------------|----------|-------------------|
| The Alqueva Dam has negative environmental impacts. | 5 | 4 | 3 | 2 | 1 |
| The Alqueva Dam promotes a depreciation of the cultural heritage. | 5 | 4 | 3 | 2 | 1 |
| The landscape is more beautiful now. | 5 | 4 | 3 | 2 | 1 |
| The natural heritage destroyed by the Alqueva Dam was not very important. | 5 | 4 | 3 | 2 | 1 |
| Since the construction of the Dam the quality of the urban areas have increased. | 5 | 4 | 3 | 2 | 1 |
| The Alqueva lake is a way to promote the Alentejo Region development. | 5 | 4 | 3 | 2 | 1 |
| The <i>mass media</i> present a very positive idea and opinion about Alqueva Region Landscape. | 5 | 4 | 3 | 2 | 1 |
| The tourism development plan takes in consideration the nature conservation and the biodiversity of the region. | 5 | 4 | 3 | 2 | 1 |



13- When was the last time you made use of the Alqueva Dam leisure infra-structures?

- Last week (1)
- Less than a month..... (2)
- In the last three monts (3)
- Less than a year..... (4)
- More than a year..... (5)
- I never used..... (6)

14- When was the last time you made use of the Alqueva Dam lake?

- Last week (1)
- Less than a month..... (2)
- In the last three monts (3)
- Less than a year..... (4)
- More than a year..... (5)
- I never used..... (6)

III – Demographic indicators

1 Gender .Male (1) .Female (2)

2 Age _____ years.

3 Nationality .Portuguese (1) .Other (2) Which one? _____.

4 Occupation _____.

Thank you for your collaboration!