



# CONTRIBUTION TO WILD DOG CONSERVATION IN WEST AFRICA

Final Report May 2007



**Principal Investigator:** Etotépé A. SOGBOHOSSOU **Associates:** Severin TCHIBOZO & Aristide TEHOU Plan

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#### **1. Introduction**

African wild dog (*Lycaon pictus*) is one of the most threatened species of carnivores and the second most threatened dog in Africa. This species, previously well distributed in Africa is extinct in many countries particularly in West and Central Africa (Fanshawe *et al.*, 1997). In countries like Benin and Burkina it has been advised to confirm the extinct status of the species. Effectively, nobody observed this species during many years in Beninese national parks. And these last two to three years, people that visit national parks encounter them. This could means that conditions in the area allow its recolonization by wild dogs. One general study on large carnivores in Benin (Di Silvestre *et al.* 2003) classified them as Critically Endangered and Di Silvestre (2002) pointed out the difficulty to estimate their populations by usual census methods. However there is no particular and recent study on wild dog abundance and distribution in Benin.

Human activities are one of the most important threats to wild dog conservation, as for other carnivores' conservation. For that reason, conservation of a species or an area couldn't be sustainable if it doesn't imply local populations' awareness. It's an activity that is crucial for wildlife conservation especially in West Africa where wildlife is confined in protected areas surrounded and threatened by local populations' activities. So to conserve wildlife and wild dog in particular, it's essential to make populations be aware of the importance of the resources that surround them and to teach them how to use them. And the few programs that

exist don't usually focus on wildlife and wildlife species. Also they concerned adults. But adults are difficult to change. They had already their habits. At contrary, educate people since their young age is a better guarantee to a better conservation and management of resources in the future.

These reasons lead to the conception of the present project which really started around Pendjari in August 2006.

# 2. Objectives

This project on Wild dog conservation in Benin, West Africa aims at contribution to the conservation of the endangered species in West Africa.

The project had two main objectives:

- gather the few data on wild dog distribution and abundance in Benin National Parks (Pendjari and W),
- educate/aware local populations especially primary schools kids on wild dog conservation.

# 3. Staff involved

The first responsible of the project, Principal investigator is Sogbohossou Etotépé A., an agricultural engineer with a Master in Natural Resources Management, specialized in large carnivores conservation.

She was assisted by Severin Tchibozo and Aristide Tehou. Severin Tchibozo is the Program Director of CERGET NGO and has a lot of experience in working with local population for the conservation of natural resources. Aristide Tehou is the head of Ecological Monitoring in Pendjari Biosphere Reserve and served mainly as link between the NGO and the local Association for the Management of the Reserve.

By the side of local populations, we work mainly with the Local Association for the management of the Wildlife Reserve (in French AVIGREF or Association Villageoise de Gestion des Réserves de Faune). All villages that are around the reserve are represented in this association which works for the management of the reserve with the Wildlife Administration. The president of the association Djatto Djileni was the link between the Association and the NGO. He was in charge of radio broadcasting at the local rural radio. He also supervised the works of the two animators that works in school. The reserve is bordered by two roads and villages along these roads. And languages spoken on the two axis are different. So there were two animators, one per axis: Denis Kassa for the axis Tanguiéta-Porga and Jacques Tankouanou for the axis Tanguiéta-Batia.

Pendjari Project, the administration in charge of the management of the Biosphere Reserve was informed and associated to activities especially the second contest and the visit of the park.

### 4. Activities

## 4.1. Wild dog distribution in Protected Areas in Benin

Very few data are available on wild dog distribution in the two national parks of Benin (figure1). Records in Pendjari Biosphere Reserve date from 2000. And it's mainly these last years that the park administration started to pay attention to the species and aware rangers so that they could collect data on the species.

In W Biosphere Reserve, Benin part, till now, the monitoring system of the administration about wild dog is still poor. That's why data from W are based mainly on interviews of rangers, trackers, hunting guides and populations. The figure 2 presents the evolution of wild dogs' sightings the last seven years. The figure 3 presents the numbers of observations made by herders, rangers and trackers in W since 22 years. Herders are considered because even if it's forbidden, they use to bring their cattle grazed in the protected areas and they know well wildlife especially carnivores that prey sometimes on their cattle. Trackers used to follow rangers in the park for monitoring. Many of them are also ancient poachers, so they know correctly the protected area.

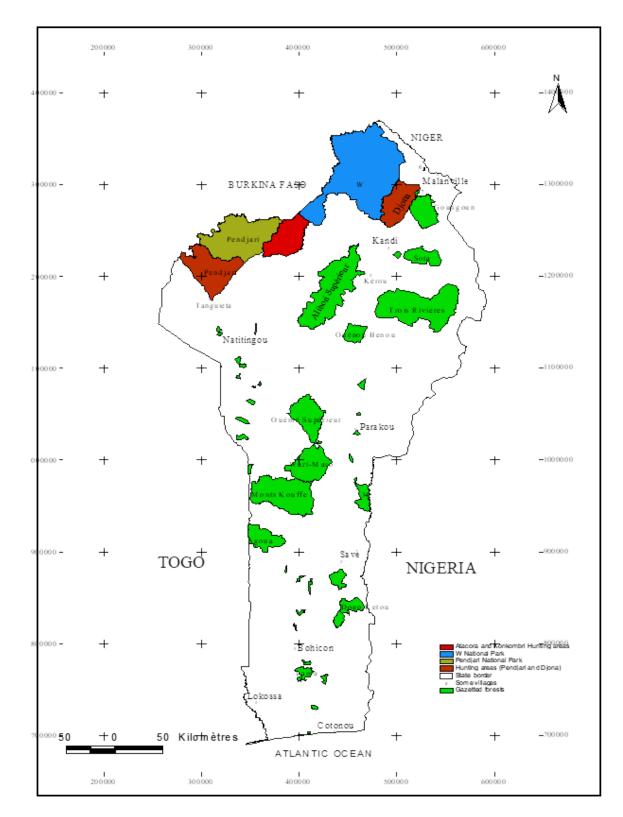
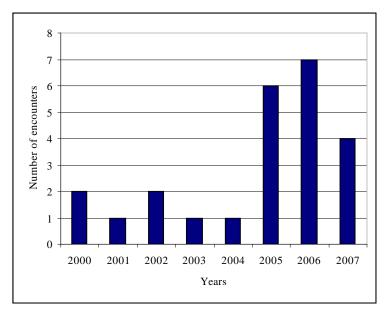
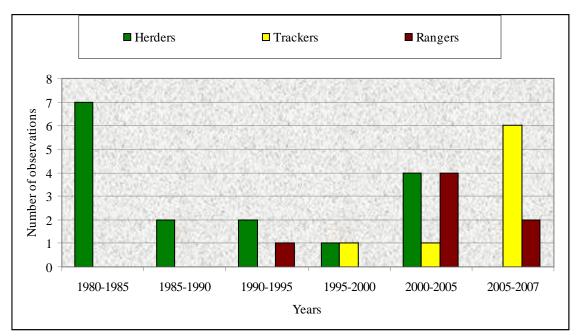


Figure 1: Protected areas in Benin Republic, West Africa.



**Figure 2:** Evolution in the numbers of wild dog sightings in Pendjari Biosphere Reserve these last seven years (Source Tehou, pers. com).**N.B.** Sightings for 2007 are just for the three first months of the year.



**Figure 3:** Evolution of herders, trackers and rangers wild dog's sightings in W park since 1980.

Results from W are given by a small percentage of rangers. 72.22% of rangers in W never saw a wild dog against 11.1% of trackers. This difference could be explained by the fact that rangers worked mainly since 5 to 6 years in the park while trackers know the park since fifteen, twenty years and more.

The mean size of groups in Pendjari is  $2.6 \pm 1.7$  wild dogs per group. In W, where observations are very sparse comparing to Pendjari, the mean size of groups is 1.3 according to rangers' observations. According to trackers, it's of 3.8 individuals per group and 2.1 individuals when we consider the same time period as for rangers (these last years).

We notice that wild dog numbers drops in years 1980s and seems to be recovering a little since 2000. Sayer & Green (1984) have reported that in years 1950, groups of 6 to 20 wild dogs are regularly recorded in parks in Benin. Their abundance decrease in years 1960 and seems to continue decreasing after this period. Di Silvestre *et al.* (2003) estimate that they should be two groups of wild dog in Pendjari and some rare individuals in W.

The situation actually seems to be worse in W than in Pendjari. This could explain by the fact that Pendjari has been better and earlier conserved than W. And W is bigger and has a fewer density of roads that don't facilitate the monitoring.

All these results confirm the classification of the species as Critically Endangered in Benin (Di Silvestre *et al.*, 2003). However a monitoring system should be set up in the protected areas in the country to monitor all changes in the abundance and distribution of the species, as it is already done in Pendjari. Rangers also should be learned how to recognize the species because some and populations also confuse it with other species like jackal. More specific studies in some years, could also be set up to study the real status of the species in Benin and neighboring countries.

# 4.2. Wild dog in tradition and Cultures in northern Benin

Wildlife plays a great role in traditions and culture in the world and in Africa in general. This influence of wildlife is higher in populations that live close to protected areas and wildlife reserve. This influence can be showed by diverse ways. Some people have one or more species as taboos (they can't eat the meat, they can't kill it, they prey it to get things in their life...). There is a lot of tales, stories and proverbs on wildlife species. Some species like lions are really frequently cited (Sogbohossou, 2006). But wild dog is few represented in traditions of populations living around protected areas.

After interviews with populations around Pendjari and W Biosphere reserves in Benin, we noticed that wild dog is few known. Around W and Pendjari parks, people almost don't know him. And it's only old, very old people who encounter it or hear about it.

If species like lion, according to traditional tales appeared like species feared, respected, wild dog is seen as a dangerous animal. According to traditional tales in some regions, wild dog once lived with human beings but have been chased from villages to live in the bush because it predate on domestic stock and sometimes attacks human. So wild dog is really seen as a negative species. These could easily explain why it's one of the carnivores that have been killed, hunted by populations in the past, what is surely one of the cause of his rarity today.

66% of populations considered wild dog as a pest against 33% that are indifferent. A higher percentage (87.5%) considered it as a danger for livestock. Herders considered sometimes wild dog as being more dangerous than lions and hyenas because they used to say that wild dogs don't fear humans. It's easier to make lion fleeing away from cattle it is trying to kill than a wild dog. And they don't also like the way wild dog kill.

The study of wild dog byproducts in wildlife markets showed it's almost absent from wildlife market. If lion, hyenas skin, fat, are quite easily found in wildlife markets, wild dog have not been found. This is an indicator of the extreme rarity of the species. This rarity leads also to a rarity in traditional medicine. Very few people remember utilizations of wild dog parts and this knowledge will probably disappear if the species stay rare. The easiest use of wild dog recorded is the use of fat against rheumatism.

## 4.3. Populations awareness on wild dog conservation

Before the beginning of the project, we had planned to do education of schools kids and teachers in some schools around Pendjari Biosphere Reserve. We also planned to organize some contests followed by prizes and compile collected information in form of a pamphlet on wild dog and other carnivores conservation.

Activities started in August with the information of AVIGREF about the project, its contents and how collaboration will be possible.

Radio broadcasting started in September on themes related to conservation of wild dog and other large carnivores. Diverse themes has been developed like The radio broadcasts have been animated by the president of the AVIGREF.

In October, contacts have been made in schools so that children education started in November. Because mainly children of the two last classes of the primary school understand, speak and read relatively fluently French, awareness is focused on them. They constituted thus the wild dog club. Some kids from other classes really interested also participated to wild dog clubs meetings. Each school has meeting every two weeks. The president of AVIGREF coordinates also the work of animators and visits them during wild dog clubs meetings. Meetings are participative. Kids are asked to collect information on wild dog and other carnivores species (lion, cheetah, leopard, hyenas) from their parents and to share it with their companions. But as it has been noted, parents know few wild dogs. So a great part of the information comes from animators.

Meetings are done based on fact sheets prepared by the Principal Investigator.

A first contest has been organized in November. But results were so bad that it has been organized again in December. For this first contest, it has been asked to kids to gather stories/tales and proverbs on wild dog and send them. Winners received school stationeries (copy books, pens ...). These gifts have been really appreciated because poverty is a problem in this part of the country, like in most rural areas. Many parents lack of means to send their kids to school or to buy them the necessary supplies. Parents, teachers and school kids were very happy and express it. Teachers seize the opportunity

to tell us their needs in term of materials for teaching. They think the project was a good one but, as we noticed for the first contest, the kids don't have a good level of education, due to the lack of teaching materials. They express the desire to get some help. That's why we decide to help a little bit schools that are involved in the project. This to have more commitment from them for the project and for wildlife conservation in general.

Actually, we're planning to integrate wildlife teaching into regular program of education. This will be the next step on the project we planned not to stop with this first experience. Almost all teachers recognized they never heard about wild dog and don't know the species. Many of them never visit the park and thought a park visit will be a great opportunity for them and school children to better know what they are learning and will increase the interest in wild dog and wildlife conservation.

This confirms the decision to visit the park after the second contest.

In February another contest has been organized. But it was then asked to children to make a drawing on the relation human-wild dog. The prize was a visit in Pendjari Biosphere Reserve by winners and some teachers from involved schools. Twelve children and twelve teachers/school directors has been selected to visit the park. They have been joined by AVIGEF representatives and the head of Ecology of the park. This visit was not a simple tourism safari but the kids clean the park from garbage like plastic bags and cans threw by tourists. They also received a tee shirt on wild dog conservation. It was a very interesting experience. Children and teachers appreciated the visit. Later, some participants have been interviewed for local and national radios. This allowed to aware more people in other parts of the country on wildlife and natural resources conservation.

The last action has been trees planting in school by local population to make permanent this action of wild dog conservation in the area around Pendjari Biosphere Reserve. Mainly *Khaya senegalensis* an indigenous multi-uses species have been planted with *Gmelina arborea*.

Some pictures at the launching of the second contest in different schools around Pendjari Biosphere Reserve





Some drawing of school children for the second contest



Some pictures of the park visit



At a mirador (view point), near the most important waterpoint in the park (Bali)



Kids, their teachers and the supervision team near a river, in Pendjari National Park



Left: Tanongou waterfalls near Pendjari Hunting Zone, on the way to the park. Right: Denis, an animator during the park visit.

## 5. Balance sheet

The table below presents different expenses made during the project, comparing to prevision made before the beginning of the project.

About local travel, we spend more than expected. This is due to the high cost of the car location that takes into account the driver perdiem. Travel to the field concern the bus fees to go the project site. CERGET members work in the capital Cotonou that is far from Tanguiéta, the main city around the reserve. To spend less, the car location is done while on the field and not from Cotonou.

For project staff, we spent less than expected. It includes perdiem for the staff of the NGO, costs of a guide for the research survey part and partly the cost of AVIGREF animators. Because it's mainly for accommodation and food, we include food of kids during the park visit.

We also spend a bit less for communication, education and a bit more for materials. We increased a bit the contribution to NGO global costs because the amount in the budget plan was too low (2,4% now instead of 1,1%). But these little differences are mainly due to the fact that we didn't know the exact cost of everything before the beginning of the project and some costs also changed.

|                     | Prevision |       | Details of items    | Amount spent |       | Balance |
|---------------------|-----------|-------|---------------------|--------------|-------|---------|
|                     | F CFA     | £     |                     | F CFA        | £     | (£)     |
| 1. Local travel     | •         |       |                     |              |       |         |
| Car location        | 317 614   | 354   | Car location        | 35 000 x     |       |         |
|                     |           |       |                     | 22 days =    |       |         |
|                     |           |       |                     | 770 000      |       |         |
| Car maintenance     | 144 452   | 161   | Car renting for     | 3 cars x     |       |         |
|                     |           |       | park visit          | 60 000 =     |       |         |
|                     |           |       |                     | 180 000      |       |         |
| Fuel                | 385 803   | 430   | Fuel                | 209 650      |       |         |
| Driver per diem     | 192 801   | 215   | Travel to the field | 22 000F x    |       |         |
| -                   |           |       |                     | 8            |       |         |
|                     |           |       |                     | journeys     |       |         |
|                     |           |       |                     | $= 184\ 000$ |       |         |
| Sub-total           | 1 040 670 | 1 160 |                     | 1 343 650    | 14976 | - 337.6 |
|                     |           |       |                     |              |       |         |
| 2. Project and loca | al staff  |       |                     |              |       |         |
|                     | 1 157 408 | 1 290 | Accommodation       | 1 040 000    |       |         |
| Accommodation       |           |       | of staff            |              |       |         |
| of project staff    |           |       |                     |              |       |         |
| in project site     |           |       |                     |              |       |         |
| -                   |           |       |                     |              |       |         |
|                     |           |       |                     |              |       |         |
|                     |           |       | Food for kids       | 54 050       |       |         |
|                     |           |       | during park visit   |              |       |         |

| Guide –   | 276 137   | 310   | Allowance for                                    | 216 740                         |        |         |
|---|-----------|-------|--|---------------------------------|--------|---------|
| Interpreter   |           |       | some animators                                   |                                 |        |         |
| Sub-total   | 1 433 545 | 1 600 |  | 1 310 790                       | 1461   | + 139   |
|   |           |       |  |                                 |        |         |
| 3. Education/Awa  | reness    |       |  |                                 | -      |         |
| Training of<br>teachers<br>(material, trainer<br>fees)    | 303 260   | 338   | Tee Shirts                                       | 105 600                         |        |         |
|   |           |       | Stickers on wild<br>dog conservation             | 15 000                          |        |         |
|   |           |       | Tree planting                                    | 70 000                          |        |         |
| Training of<br>school kids<br>(material, trainer<br>fees) | 385 803   | 430   | Animation in<br>school/Allowance<br>for trainers | 303 260                         |        |         |
| Prices for school<br>kids                                 | 482 702   | 538   | Prices for first<br>contest                      | 60 000                          |        |         |
|   |           |       | Deliberation for<br>the second contest           | 14 375                          |        |         |
|   |           |       | Drawing on<br>school walls                       | 350 000                         |        |         |
|   |           |       | Radio awareness<br>after visit                   | 30 000                          |        |         |
| Sub-total   | 1 171 765 | 1 306 |  | 948 235                         | 1056.9 | + 249.1 |
| 4. Communication  |           |       |  |                                 |        |         |
| Internet fees   | 29 608    | 33    | Internet fees                                    | 29 000                          |        |         |
| Telephone   | 111 255   | 124   | Telephone  | 110 000                         |        |         |
| Mail (for report sending)                                 | 48 450    | 54    | Mail   | 15 000                          |        |         |
| Sub-total   | 189 313   | 211   |  | 154 000                         | 171.6  | + 39.4  |
| 5. Furniture  |           |       | -  |                                 | -      |         |
| Ink for printer   | 91 516    | 102   | Ink for printer                                  | 35 000/in<br>k x 4 =<br>140 000 |        |         |
| Copies  | 9 869     | 11    | Copies   |                                 |        |         |
| Paper, pens, CD,  | 87 030    | 97    | Paper, pens, CD                                  | 80 000                          |        |         |
| Sub-total   | 188 415   | 210   |  | 220 000                         | 245.2  | - 35.2  |
| 6. Results extension                                      |           |       |  | •                               |        | •       |
| Pamphlet<br>edition                                       | 188 415   | 210   | Pamphlet edition                                 | 185 000                         |        |         |
| Sub-total   | 188 415   |       |  | 185 000                         | 206.2  | + 3.8   |
| 7. Administrative   | costs     |       | •  | •                               |        | •       |

| Contribution to<br>the NGO<br>administrative<br>costs | 47 552    | 53    | Contribution to<br>NGO<br>administrative<br>costs | 103 325   |       | - 58.5 |
|---|-----------|-------|---|-----------|-------|--------|
| Sub-total   | 47 552    |       |   | 100 069   | 111.5 |        |
| TOTAL   | 4 261 744 | 4 750 |   | 4 261 744 | 4 750 | 0      |

## 6. Conclusion and perspectives

At the end of this project on Wild dog conservation in Benin, it could be said that it has been a success.

About the gathering of information on wild dog by parks administration, results showed that very few wild dogs have been observed especially in W park. In W park, there is no official record of wild dog observation in Ecological Monitoring Service datasheet. But trackers, rangers reported some sightings of wild dog that have to be confirmed. In Pendjari, wild dog has been described to rangers so that records are more valuable than in W. A monitoring system has to be installed in the two parks to follow more accurately the recovering and evolution of wild dog in protected areas in Benin.

According to the members of the local association, to the teachers and school kids, the project has been a great success. But they regretted that the actions were limited in time and cover. Of course, it was a pilot project but after this introduction, the project needs to be developed. For the future actions, we suggest:

- to consider more schools and create a network of wild dog /wildlife clubs in the area,
- to integrate more formally wild dog, other endangered species and wildlife in general knowledge in the official program of the schools in the region and in places far from protected areas;
- to plan more visits to the park with a higher number of participants ;
- to help involved schools with material so that they could be more stimulated to participate to actions.

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We are grateful to the head members of the local Association of local populations, AVIGREF, that believe in these project objectives and assist us all along its completion. Many thanks to the kids, their teachers and populations that participate and make this project their own.

Our gratitude to Project Pendjari, the Direction of Pendjari National Park, especially for allowing a free visit of the park by the winners of the second contest.

#### Annexes

#### Names of winners of the first contest

| Axis              | School       | Names  | Sexe and Class |
|-------------------|--------------|--|----------------|
| Tanguiéta - Porga | Tiélé        | Kassa André                                  | M, CE2         |
|                   |              | ¤ Sambieni Bernadette                        | F, CM1         |
|                   |              |  |                |
|                   | Porga        | Tchansi Adjima                               | F, CM1         |
|                   |              | Sambieni Donné                               | M. CM1         |
|                   |              | Sambieni K.Barthelemy                        | M, CM2         |
|                   |              | Kouago Augustin                              | M, CM2         |
|                   |              | Gnarigot Jacques                             | M, CM2         |
|                   |              | Dari Paul                                    | M, CM2         |
|                   |              |  |                |
|                   |              | ¤ Gnarigo Moise                              | М              |
|                   |              | ¤ Yoa Tchabo                                 | М              |
|                   |              | ¤ Kiatti Dassibou                            | М              |
|                   |              | ¤ Kouago Mouarga                             | М              |
|                   |              | ¤ Nouanti Jeanne                             | F              |
|                   |              | ¤ Gnammi Daouda                              | М              |
|                   | Tchanwassaga | Tchando Antoine                              | M. CM2         |
|                   | Tenanwassaga | ¤ Yoro Kassafo                               |                |
|                   |              |  |                |
|                   |              | ¤ Kossipo Bonaventure<br>¤ Kossipo Alexandre |                |
|                   |              |  |                |
| Tanguiéta - Batia | Tanongou     | Andali Arouna Sakina                         | F, CM2         |
| -                 | -            | ¤ Andali Inoussa                             | М              |

|       | ¤ Boundja Bienvenu   | М      |
|-------|----------------------|--------|
|       |                      |        |
|       |                      |        |
|       |                      |        |
| Batia | Malidja Hari         | M, CM2 |
|       | Sabardya Abdoulaye   | M, CM2 |
|       | Loena Moussa         | F, CM2 |
|       | ¤ Yetema Tchangnigou | М      |
|       | ¤ Amourda Poundi     | М      |
|       | ¤ Bouakabo Daouda    | М      |

The names with  $\alpha$  means they are not winners but they receive a consolation prize. We did that because of the few numbers of winners.

M for boy F: for girl CM2: the last class of primary school CM1: the class before CM2 CE2: the class before CM1

#### Names of winners of the second contest

We selected the following school kids for the drawing contest. They are 10-11 years old.

| Axis              | School       | Names               | Sexe and Class |
|-------------------|--------------|---------------------|----------------|
| Tanguiéta - Porga | Tiélé        | Kossi Sambieni      | M, CM1         |
|                   |              | Defitou Tchatti     | M, CM1         |
|                   | Dassari      | Adjaratou N'oueni   | F, CM1         |
|                   |              | Charlotte Gnami     | F. CM2         |
|                   |              | Julienne Nonti      | F. CM2         |
|                   |              | Crespin Kianti      | M, CM2         |
|                   | Porga        | Innocent Sambieni   | M, CM1         |
| Tanguiéta - Batia | Tchanwassaga | Véronique N'weiman  | F, CM2         |
|                   | Tanongou     | Natchindjabo Pascal | M, CM2         |
|                   |              | Yentema Bienvenu    | M, CM2         |
|                   |              |                     |                |
|                   | Batia        | Donné Djadjouali    | M, CM2         |
|                   |              | Aboudoulaye Sabodja | M, CM2         |

N.B. We could notice that we have a good representation of girls in the winners in the northern part of Benin where the schooling rate is about 51% with a difference of 31% between boys and girls, what means that there is about one third of school children that are girls.