



INITIATIVES POUR L'AVENIR  
DES GRANDS FLEUVES  
INITIATIVES FOR THE FUTURE  
OF GREAT RIVERS



# The Blue Nile

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BY AIR  
MAIL



## ROUTE PLAN

- Addis Ababa
- Bahar Dar
- Tana Lake
- Tislat
- Renaissance Dam

For most of us, the Nile has no colour. And it is Egyptian.

That's because many of us pay more attention to history than to geography, and in the stories of history, we tend to listen only to the voice of the victors.

Once upon a time there was Egypt, the daughter of all the possible gods, including the sun no less. An Egypt self-proclaimed "Gift of the Nile". Without the summer floods, no fertile silt was deposited on the banks and thus there was no Egypt.

The affair was understood: the Nile and Egypt were intrinsically linked, and all the more closely since the Pharaohs had, by weaving this union, created the most poetic of mythologies, illustrated by the most beautiful of bestiaries: jackal, falcon, cat ... And add to that a grandiose civilisation of the dead. How could one fight against it? It would be like separating the Parthenon from the Acropolis.

And when the great powers, Ottoman or British, dominated Cairo and the delta, meaning downstream of the river, what other choice did the countries upstream have but to give up the water to their all-powerful neighbour, even if this water came from their land?



Now, let's look at the geography.

First, where is the source of this legendary Nile, on the Earth or in the sky?

Which leads to another question, how can the return of these miraculous annual floods be explained?

This twofold enigma never ceased to puzzle explorers.

It was long known that two huge rivers merged to form the Nile and that the city of Khartoum stood at their confluence.

But how far upstream one of these rivers could one go, up the Nile called blue due to the dark colour of its waters?

The Jesuits, always around when it's a question of amassing knowledge, set off for adventure. The name of the first was Pedro Saez,

a Spaniard who discovered two natural springs sixty kilometres south-southwest of Lake Tana at the foot of Mount Gish on 21 April 1618. From there flows a river which little by little swells and reaches the lake. Ten years later, another Jesuit, Father Lobo, witnessed a ceremony of the Agaw tribe at this same site. Their ritual brought them to this place to sacrifice cows and, to prove their adoration and gratitude to the river, they throw the heads of their finest beasts into it. Naturally, the Jesuit protested against these heathen practices and provided a far more scientific explanation for the floods of the Nile: the river's flow rate increased due to the rain and the melting snow.

As simple as that.

The expedition financed 350 years later by the Emperor Haile Selassie added nothing new: the Blue Nile really does come from Lake Tana, at the heart of the Ethiopian Highlands.

Let's move on to the second branch of the Nile: that called the White Nile due to its clear waters. Another expedition (as late as 2006), proved that the White Nile comes from Ruanda.

At last a full map of the river could be drawn !  
 The total watershed of the Nile covers more than 3 million square kilometres, making it the second or third greatest river in the world. It not only crosses Egypt but ten other countries of which Ethiopia contributes 90% of its resources, by far the most. The Blue Nile alone, which also flows from the Ethiopian Highlands, contributes 59% of the global flow rate.

For centuries, Ethiopia lacked the technical resources and the political and military strength to take its share of this wealth.

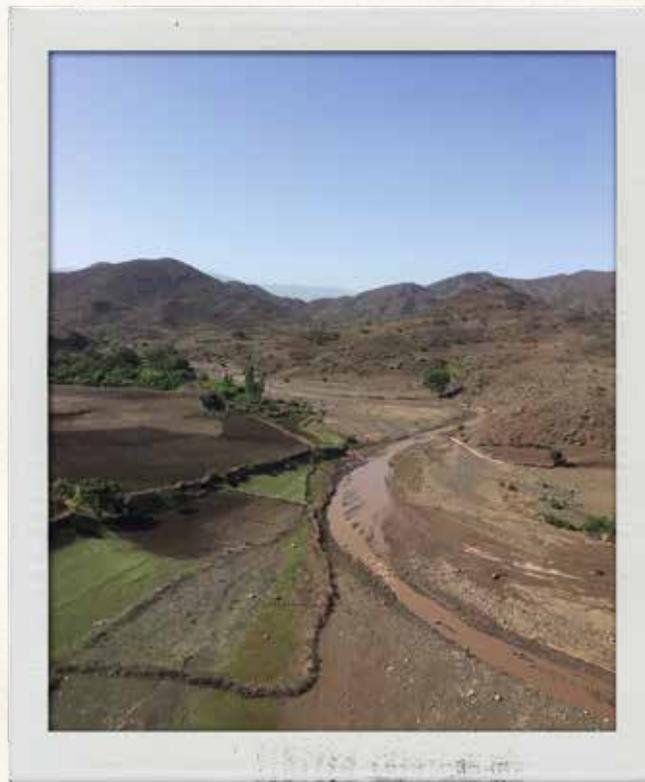
The times have changed and the balance of power has tended to swing the other way.

This old, very old, and legendary country, is raising its head. It should be recalled that it was one of the only countries of the entire African continent to have practically escaped colonisation, except for only five years (by the Italians : 1935-1940)! Ethiopia was the home in particular of the Queen of Sheba and Prester John.

Their stories are worth the trip.

Here, we are in the north of the future Ethiopia, a thousand years before Jesus Christ, at the

foot of Mount Ras Dashen (4,620 metres), in the city of Axum, the capital of a kingdom ruled with wisdom and measure by a woman of exceptional beauty. The Queen of Sheba feared the expansion of another kingdom, Judea. She decided to go to meet its king, the illustrious Salomon. To prove her good faith and her desire



*Ethiopian Highlands*

for alliance, she brought with her all sorts of herbs and spices, gold and precious stones. This meeting was recounted in the Bible (Book of Kings 1, 10 and Chronicles 9) which, no more than I, dwells little on the love story between the powerful king and his visitor.

Another founding story of Ethiopia.

Fifteen hundred years after the Queen of Sheba, a man called Prester John was to play an important role in the history of maritime discovery, although it is not known whether

he really existed. In the 15th century, one of the objectives of the Portuguese navigators was, by circumnavigating Africa, to join the Christian kingdom of this Prester John, located, according to rumour, in Abyssinia. From this base, it was possible to go northwards and reconquer Jerusalem, retaken by the Arabs in 1187 following the failure of the Crusades.

So, the history of Ethiopia is far from recent. From the beginning of time it has considered itself as an empire, contrary to so many other



Semien Mountains

lands divided by the hazards of colonisation and which are not even nations. The Negus was the "king of kings", meaning above all the regional rulers. Ethiopia now considers itself "ethno-federal".

This feeling of strength is now reinforced by the (dangerous) realities of demography.

With 30 million people living in Sudan and 80 million in Egypt, Ethiopia already counts more than 94 million. Since 1991 and the civil war which, after myriad famines, saw the

people benefit from the fall of the USSR and the toppling of its ally, the bloody Mengistu, an indubitably authoritarian but efficient regime has finally restored stability and growth, much to the envy of Egypt.

Ethiopia needs currency (to finance its investments) and energy (75% of the population is still not connected to the grid). It should be remembered that in spite of its progress, this country remains one of the poorest in the world. Ethiopia is rated 177th



(out of 188) in the ranking of countries by HDI, the Human Development Index, with an income per capita of only \$1,430, a life expectancy from birth of 64 years (the only good point) and a disastrous level of education, with a average school attendance time of two and half years !

One can understand why the exploitation of its immense energy resources is crucial and a priority for the government of Addis Ababa.

We know the natural clientele for its electricity, besides the Ethiopians themselves : their immediate neighbours Egypt, Sudan, Djibouti, and Kenya. Other countries further away represent other potential clients.

Ethiopia has a potential hydroelectricity capacity estimated at 45,000 Megawatts of which it only exploits 5% today. This is before the huge Renaissance dam comes on stream, a project we'll come to further on. Regarding this, we still await the ministerial green light to visit the construction site. The embassy team warns us: authorisation is usually granted, but at the last moment, and often too late, when one has already returned to France.

There's no use straining at the leash.

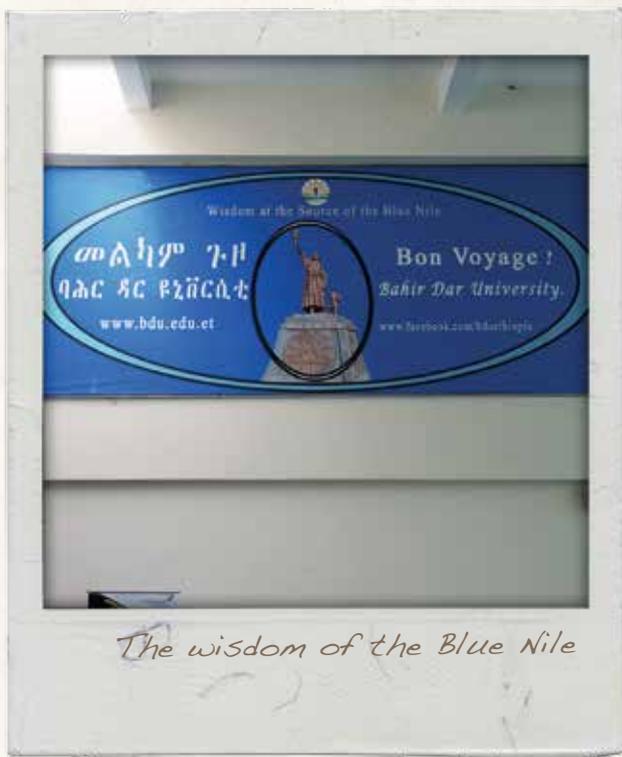
For a globetrotter, it is wiser to learn to be fatalistic and savour every moment.

Flight ET 120 took off very early this morning on 10 May 2016, bound for Bahar Dar, on the southeast edge of the famous Lake Tana, so large that Bahar Dar means "gateway to the sea" : 85 kilometres from north to south and 65 from east to west. The most northerly of all the volcanic depressions that stretch until lakes Victoria, Kivu and Tanganyika, and which mark out the Great Rift Valley, this long tectonic tear that crosses the whole of east Africa.

The atmosphere strikes us immediately we arrive at the airport :

"Welcome to the wisdom  
of the blue Nile".

The local university welcomes the arriving visitors by convening them to receive the "wisdom of the Blue Nile". The river steals the limelight from the lake. Despite the countless hotels offering unforgettable views over the ever-changing colours of this immense



*The wisdom of the Blue Nile*

stretch of water, they have nearly all chosen to call themselves after the Nile : Blue Nile Resort, Blue Nile Hotel and Spa, and so forth. The touristic ambition of Bahar Dar is obvious and legitimate; wide avenues garlanded with bougainvillea and shaded by different trees, and fluid traffic, brightened by a fleet of tiny three-wheeled taxis that the locals call "bajaj".

Is it in honour of the two Niles that they all carry the same livery of its two colours, white for the hood and blue for the rest of the miniature bodywork ?

- Have you seen the source of the Nile ?

I answer with another question, always the same and which does not seem to please:

- Is Lake Tana REALLY the source of the Nile ?

After many hesitations, and as many embarrassed smiles, they consent to confess that the REAL source of the Nile can be found to the southwest, hidden, about sixty kilometres away, in mountains too high for someone of my age to take the risk of exploring. Now, if you want to see the REAL source of the Nile, this is the RIGHT address. HERE AND NOWHERE ELSE.

I have understood that if I don't want to be barred from staying in Bahar Dar and until my demise (an intolerable exile since I'm starting to fall in love with this region of the world), I must immediately acquit myself of this initiatory pilgrimage to avoid this excessively cruel sentence. So let us go and take a small boat from which, after a few minutes hailing

the cormorants more elegant than their Brittany cousins, we glimpse a very nondescript opening in the bank. You question your boatman several times because you can't believe your eyes : is this then the Nile, this very modest river that points southwest ? That, the Nile, barely thirty metres wide ! Don't make me laugh!

And as your guide confirms, and the cows that graze on the banks appear to nod "yes", you are obliged to give-in.

Seeing your deception, and I cannot have been the first, the boatman returns to the lake. Suddenly, I cannot hold back my infantile exclamations. One, then two and then four hippopotamuses appear. We see their large eyes emerge just above the surface of the water, before they snort and dive. The proof is there: if these river horses (hippo, potamos) have chosen to live here, it's because it is a great river and one that flows to the sea. Dolphins or vulgar fish would have sufficed to celebrate a simple river.



The showpiece of a river, the scene that all await to applaud, is the waterfall, the place where its impatient waters suddenly tired of flowing too slowly to the sea, decide to speed up their pace and plunge. The PARANA Falls, the VICTORIA falls for the Zambesi, and the "rapids" on every river, those spectacular passages called

"jumps" in Guiana... I couldn't miss the first "waterfall" of the Blue Nile, only 34 kilometres from the lake. But I had been warned : my back would suffer. Though hardened by all the worst tracks the world has to offer, never had my old carcass been shaken so much.

But don't worry, when, fired by my story, you go to hail the Nile the road will have been rebuilt. The Chinese are at work. It is their companies that build and then rebuild all the country's infrastructures.

This buffeting, nonetheless violent and reminiscent of the Raz de Sein by strong wind and a counter-current (a spring tide with



*The Blue Nile out of lake Tana*

a coefficient of 110), is forgotten, because before reaching the fall, you find yourself far, very far in the past, on a page of the Bible. Nothing can have changed with the passage of so many centuries. The same way of ploughing the earth, with an ard, a long iron spike bound to pieces of wood, the whole assembly pulled by two oxen; the same shepherds watching over their herds, still silhouettes covered in large shawls; the same small steps of donkeys obscured by their burdens; the same women bent and then straightened and bent anew, grasping their pestles; the same children running everywhere, less for fun than to help in the fields, plant,

weed, and frighten the seed eating birds, or carry wood for the evening meal. Don't you believe that such a journey into the Bible was worth a little disturbance?

And would you believe that all these human beings smile? Trust me: I'm not naïve, or misguidedly in love with bygone eras "where everything was obviously better", or an obsessive disciple of a dictum preaching a return to the "authentic but alas now lost values" of a rural civilisation. Yes, we drive sufficiently slowly, from pothole to pothole to see that most of the smiles are real SMILES.

So I'm crossing "improved" Biblical times. No one doubts the literary qualities of the Book, but one can hardly say that smiles are commonplace in the Bible.

In the village of Tissisat, the site of the waterfall is called Tisoaha, "smoking water". A pertinent choice: the water transforms into vapour as it falls. Like music, water is an element of metamorphoses: like life. There's no mystery that all life come from water.

We have to get out of the car. I will always remember the following walk as one of the most

serene moments of my life. A storm brews in the sky without breaking, as if wanting to give every chance to the light to illuminate the mountains before the deluge falls and all turns grey. On the almost red earth, fields of onions, maize and khat succeed each other, stubbornly pecked by a population of birds whose names the guide whispers into my ear : yellow billed cough (a kind of small crow), black and white ibis, hamerkop (hammerhead stork in English). I recognise the doves though I had never seen them so small or numerous: they sometimes covered the earth. Rushing from out

of nowhere, a troupe of children join us. They hold everything I could buy them: scarves, baskets, flutes, mini dugout canoes. They don't beg, they're merely happy to smile. I had never observed how different each smile can be. Every smile is a source. Every smile is the beginning of a story and every smile a childhood.

I listen. Nothing disturbs the peace in the air. None of those rumblings that announce a huge quantity of water is going to fall. The guide is sad :

- I hope you won't be disappointed. Before, the fall was much stronger !

- What happened? Drought? Global warming ?

- Not at all ! A hydropower plant. Most of the river water has been diverted at this point to supply it.

- We could have left the fall to live its life and simply diverted this poor Nile downstream of the falls.

- Yes, we could have !

My cry of admiration reassures my new friend. I can see it through a screen of trees. The falls, the first of the Blue Nile. At least what the plant has left us and I'm already amazed. A river that



Heading to the Blue Nile falls



### *The Blue Nile Falls*

suddenly becomes vertical, stuck to the brown almost black cliff; a ribbon of coffee coloured water with a dash of white, thirty metres high, ten wide, a churning pool at its base, and a gorge that swallows the surging water.

- But tell me, your Nile is anything but blue!  
- You'd have to come in the dry season, from September onwards. After March, the rain leaches the earth. The rivers have their seasons, too.

Even if one hasn't known what to expect from the sky for some time.

The long-awaited authorisation arrived.

- You're lucky said the Ambassador.

And once again we take a plane bound west-northwest to the Renaissance.

Well, to be more explicit, the huge dam built by Ethiopia that it has baptised as The Grand

Renaissance of Ethiopia.

Seen from above, from our Commander 690 (at 26,000 feet), it seems that the skin of the Earth has wrinkled and even folded ! Deep canyons gouge the plateau and the mountains that tower over it. For us, wrinkles and folds are the wounds of time. For the Earth, they are the traces of water, traces that no wind can ever erase.

The first impression deceives. Can this be the Nile, this very modest river that winds between rocks and sand banks ? My reaction brings a smile and I'm reassured: this trickle is only that of the dry season. In a week, when the rain fallen upstream arrives here, you'll see that it lives up to its name of great river.

And is that the Renaissance, that simple grey wall built to block the valley?

You know me, I've been brought up well. I want to show that I know how to hide my feelings. Thus I expressed amazement, but without being too noisily awestruck, before the magnitude of the construction. Mr Semegnew Bekeley, who greeted us, had guessed my mind. Mr Bekeley bore the title of Project Manager.



Arriving near the Renaissance Dam

- The construction that you can see hasn't reached a third of its final size. Once finished, our dam will rise up to almost the height of the two hills. It will have required 10 million cubic metres of concrete, and employed 10,000 workers including 400 expatriates belonging to 33 nationalities !

I have always observed this pride and gluttony for figures on every construction site, so huge

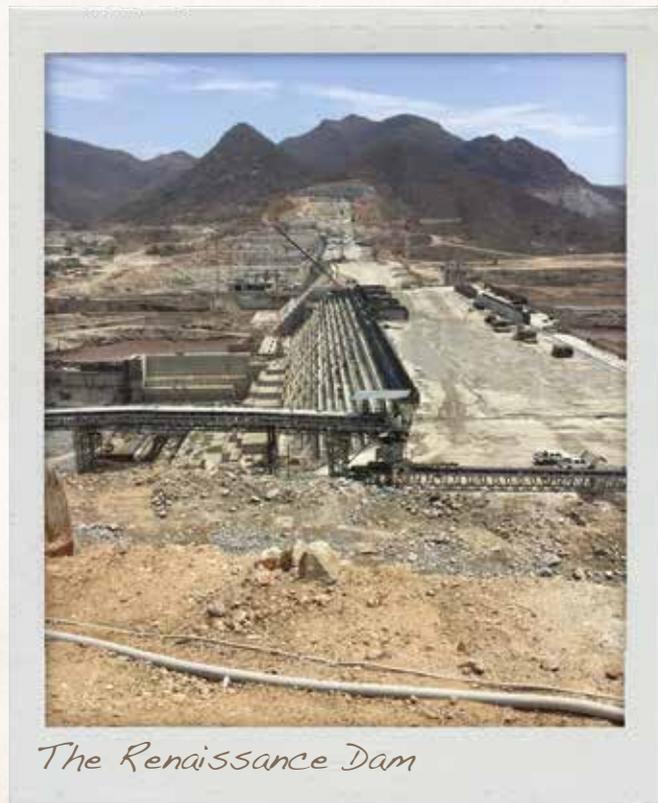
they become meaningless. A few dimensions suffice: 145 metres high, 1,800 long ; 5 kilometres for the reservoir dike (planned height : 50 metres) ; a reservoir of 1,874 square kilometres with a global storage capacity of 74 billion cubic meters, meaning twice the volume of Lake Tana, for half the surface area.

It seems better to dwell on the usefulness of such a giant. Its installed capacity will be 6,000 Megawatts supplied by sixteen turbines, for an expected annual production of about 15 TWh. This power, beside the fact that it brings the Renaissance into the club of the ten largest dams on the planet (a reminder of the podium : 1 - China, the Three Gorges dam : 22,500 MW ; 2 - Paraguay/Brazil, the Itaipu dam : 14,000 MW ; 3 - Venezuela, the Guri dam : 10,000 MW), should permit Ethiopia to satisfy many of its needs but also to export electricity to its neighbours : Djibouti, Kenya, Sudan, Egypt, etc.

Unable to resist my knack of harming myself, I could not avoid comparisons: the Renaissance will have an installed capacity equal to almost

twice that of CNR but, to save face, it will ensure a total output equivalent to CNR's ENTIRE output from its nineteen dams on the Rhone.

The more the urbane Mr Bekeley spoke, the greater his enthusiasm became. The Renaissance is the project of the Ethiopian Nation. The Renaissance is the work of



*The Renaissance Dam*



*Work in progress : Grand Ethiopian Renaissance Dam Project (GERDP)*

EACH Ethiopian. The Renaissance is the FUTURE of our country.

This good natured lyricism failed to quench the curiosity circling in my mind.

How do Sudan and Egypt view this dam ?

It will obviously have a big impact on the Nile on which they depend so much?

What is the REAL level of cooperation between the three countries involved in the Renaissance project ?

Ethiopia found itself confronted by the general hostility of its neighbours, rightly or wrongly

brandishing all sorts of recriminations, justifications (some spoke of medieval fantasies, others suspected that by considering the use of only 30% of the project's capacity, its promoters would most certainly launch the massive irrigation of land) and using their influence to discourage investors from interesting themselves in the project. In order to escape any pressure or constraint, Addis Ababa chose to fund the project ALONE, without even calling for aid from the partners most usually involved in this type of operation, including

the World Bank. Thus the entire population was explicitly asked to contribute, via a special tax on income (one month's wage of EACH Ethiopian was dedicated to the Renaissance).

This independence allowed winning time, a great deal of it, by freeing the country from many rules, especially regarding the awarding of contracts and conditions for preserving the environment.

Will this independence last when it comes to managing the structure? In the case of drought, will the management give priority to electricity production or to maintain a sufficient flowrate for the countries downstream? Teams of consultants are still working on an agreement of obvious importance: the preservation of Egyptian agriculture, and the safeguarding of the delta where nearly 40 million people live. The same question applies, subject to equally difficult arbitration, to the rhythm of filling the reservoir. Regarding this crucial point, the interests of the parties are contradictory. Ethiopia wants lots of water as soon as possible to produce a maximum amount of electricity as soon as possible. The two other countries

want to continue receiving the usual flowrates, failing which their farming and cities will become parched.

This brings to mind the Queen of Sheba's wonderful talent for conciliation and her penchant for mutual understanding.

Her successors have not forgotten her lessons. Ethiopian diplomacy is well reputed and this country joined the League of Nations from its inception.

The Emperor Haile Selassie went before it to protest against the entry of the Italian army into Addis Ababa in 1935, but to no avail: the League inflicted pointless sanctions on the invader.

Forgetting this misfortune, Ethiopia has always encouraged dialogue and respected multilateral bodies. Consequently, it was natural that Addis Ababa became the home of the headquarters of the Organisation of African Unity and of the United Nations Economic Commission for Africa. In addition, it hosts most of the United Nations agencies. All these administrations are gathered together in an enclave, a city within



this highly erudite man, and a Francophile to boot, asserts that he belongs more to the camp of the doves. So goes the art of diplomacy...



In any case, the art of cooperation must reveal its efficiency.

Water is not only used to produce electricity.

It is the principle raw material of agriculture. And there's nothing more efficient than developing irrigation to increase yields. The needs in this sector are pressing, too. Agriculture represents more than 40% of Ethiopia's gross national product and 80% of its jobs. Although it exports coffee, sesame and ... khat, the population continues to suffer from a chronic shortage of food. Eight to nine million people are undernourished. This figure can reach twenty million when drought strikes, like this year, 2016. Another necessity is that of keeping as many families as possible in the countryside to prevent them from increasing the throng of city dwellers, for the most part jobless.

How can such droughts be tolerated in this water tower of East Africa?

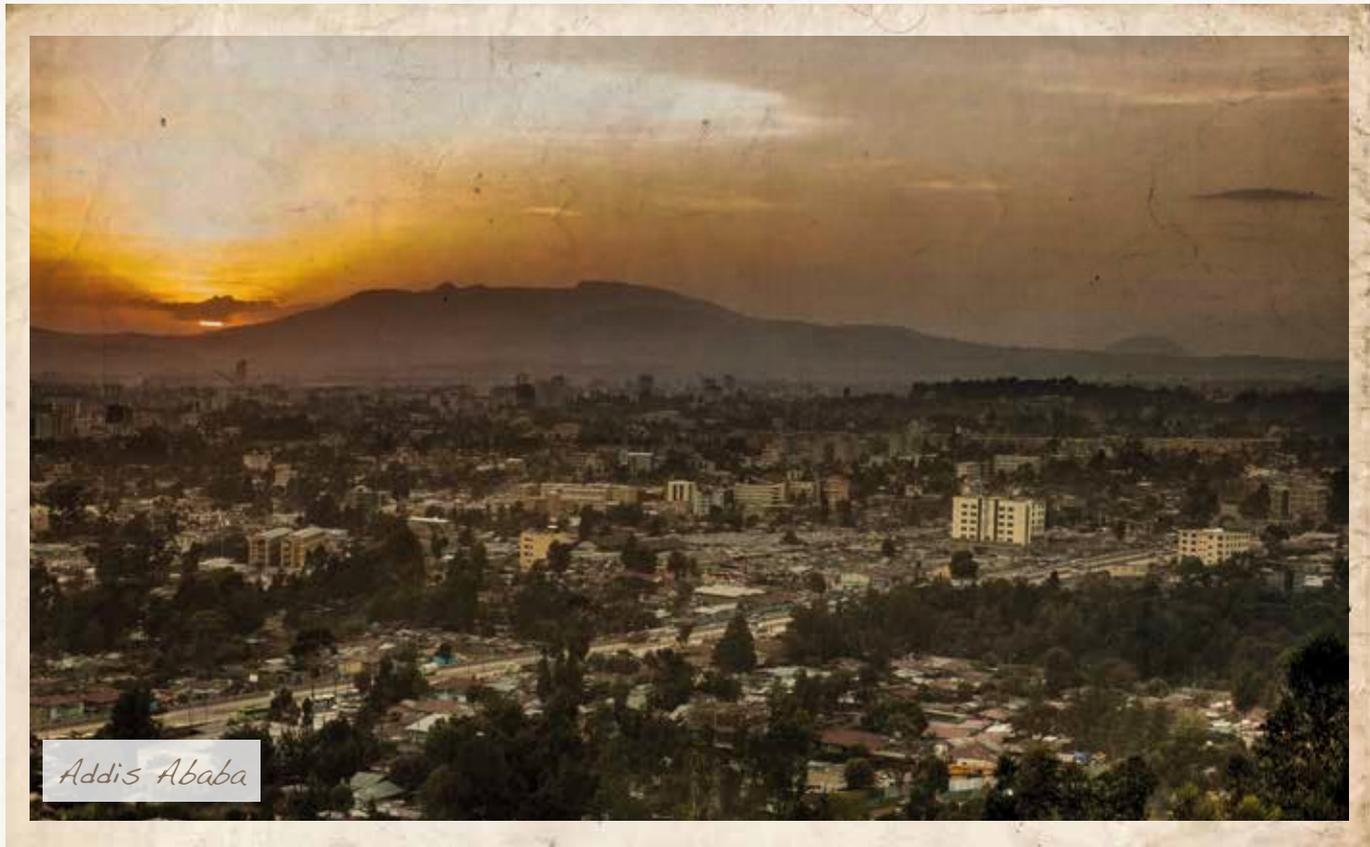
Where can the money be found to extend irrigated land, and more generally, modernise farming whose practices are often medieval? We saw how rare, very rare, tractors were; most of the peasants continue to work the land with antique ard ploughs; and their plots are tiny. There is one hard and fast rule: above

a surface area of a hectare (one hectare!) per person employed, a farm can feed its farmers. Below this threshold, it's the farmer who feeds the farm. In Ethiopia, the average surface area per peasant does not exceed half a hectare. The government supports campaigns to combat the demographic explosion but

refuses to broach the question of land, which is fundamental.

What about recourse to foreign capital?

The experiences attempted up to now are far from having given satisfaction. The authorities had confided 200,000 hectares to an Indian group to exploit. The local populations did not accept



Addis Ababa

being deprived of using their land (the State retained ownership). It led to conflicts and tens of deaths. The Indians left.

The agricultural question has still not been resolved. We know that it was and still is one of the main weaknesses of communist systems. This is due to an overriding cause: successful farming results from millions of individual decisions, and no inhabitant of this planet is more practical, more "economicus" than a peasant. Each harvest gives him the proof that his decisions were right, and of their impacts on his budget.

Another question comes to one when travelling in this country; a question that takes the form of a serious dilemma.

Apart from Addis Ababa, which has a population of three to four million, the populations of the great majority of the other towns do not exceed twenty to thirty thousand. This means that with a global population of about a hundred million, more than eighty million Ethiopians still live in the rural regions. The modernisation of farm practices would drastically reduce the

need for labour. The peasants, once unemployed, would have no choice but to settle in the towns. The government is determined to avoid this rural exodus, but at the same time, how can 100 million people be fed using simple ard ploughs?



