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Randi Movich is a John Miller Musser Fellow of the Institute spending two years in Guinea, West Africa, studying the ways in which indigenous women use forest resources for reproductive health.

Malian Medicinals

(Part I)

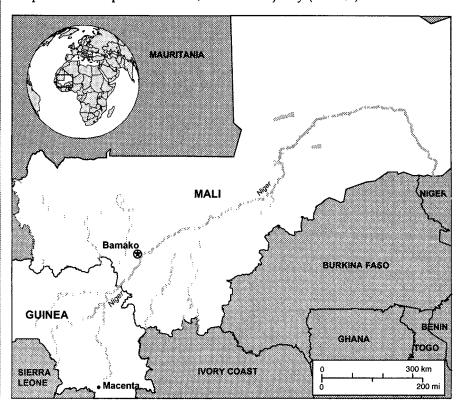
MACENTA, Guinea

December 20, 1997

By Randi Movich

The bright green mounds of freshly picked plants stand in succulent contrast to the blistering, dry, dust-filled, smoggy streets of Bamako. Masses of these healing herbs are carried on women's heads, bicycled in by young men and trucked from every corner of rural Mali and neighboring countries to this million-plus Sahelian capital city. Perhaps, the scene would not be unexpected in Conakry — a tropical coastal city whose surrounding landscape is friendly with verdant life. But surprisingly, one does not find such a profusion of plant matter in Guinea's capital, and it puzzles me to see this enormous amount of greenery here in Bamako — a city at the edge of one of the world's greatest deserts.

I know that the plants I see in Bamako's market places are just the tip of the iceberg (perhaps crest of the sand dune is a more appropriate analogy) of medicinal plant consumption. After all, the vast majority (70-80%) of sub-Saharan



Africa's population uses them for health care and general well-being. Moreover, their use cuts across social and economic classes. In the smartly decorated salon of a Malian friend educated in the US, the subject turns to medicinals. She excuses herself and promptly returns with a clay cooking pot filled with a mixture of roots. Her grandmother has instructed to her to boil the roots, mix them with honey and drink a small cup every day for a month in order to enhance fertility.

After living in Guinea for seven months, I have traveled to neighboring Mali in order to broaden my perspective in the African world of traditional medicine² and medicinal plants.

HERBORISTES

I begin my exploration at the most visible level — in the market place, with *les herboristes* (herbalists).

Herboristes bring the selling and trade of medicinals to the streets and sidewalks of most sub-Saharan cities. There are hundreds of plants to choose from, including fresh leaves, bark, roots and fruits. Akin to pharmacists, herboristes "fill herbal prescriptions" for everyday folk as well as those who are trained as traditional healers.³

Adama Sidibé is a Cuban-trained forester familiar with many medicinal plants, and equally as important, is a native Bambara speaker. In order to learn more about herboriste life, Mr. Sidibé and I took a 10-kilometer taxi ride from the center of Bamako to visit a recently constructed Herboristerie Traditionelle (Traditional Herbalist Center) in the Medina market. The imposing, round, redbrick center is composed of a series of connected igloolike huts that are placed around a central tree-filled courtyard. It is obvious that the Italian architect was aiming for "traditional" in his design, yet the roundish building becomes oddly modern among the sea of dilapidated, rusting metal roofs of the surrounding market stalls. Walking into the center gives me a feeling of protection

from the outside world. There is shade, coolness, green and red brick. I am amazed at the variety of plants I see, and the care with which each *herboriste* has so thoughtfully stacked, piled and placed each bundle of leaves, jar of powder, and pile of bark and roots. This is a medicinal feast enchanting to the eyes (and of course to the entire body). All of the *herboristes* with stalls inside this delightful structure are members of an association that solicited funding from the European Economic Community in the early 1990's.

Sina Drissa Traoré searches through his stacks and jars in order to fill a customer's request. In his brick stall (about the size of an average American bathroom) he keeps over a hundred different species used to treat illnesses such as diabetes, hypertension, hemorrhoids, malaria, venereal disease, malaria, infertility and epilepsy, to name a few. Mr. Traoré buys his plants from people who collect them in the bush from various regions in Mali, the Ivory Coast and Guinea. In the case of Guinea it is women who usually fill his request for specific medicinals. When I ask why women, he says, "Women have an easier time passing through customs; and drivers will more readily accommodate them by placing their bags strategically. Only one large sack of a plant is allowed to cross the border and women bring many." Perhaps more predictably he adds, "Women are also more willing to collect plants that bring them less profit than men."

In the quarter of a century that Mr. Traoré has been selling plants, he has seen a major change. "Before, there were not many people. Now, there are many people and much sickness." This is good for Mr. Traoré's business, but there is no tone of optimism in his voice.

When I ask Mr. Traoré about the most common sicknesses that women come to see him about, he replies, "gangué konodini" (painful periods) and "linemenpo" (Bambara for symptoms associated with a range of sexually transmitted diseases). Mr. Traoré is vague when I ask

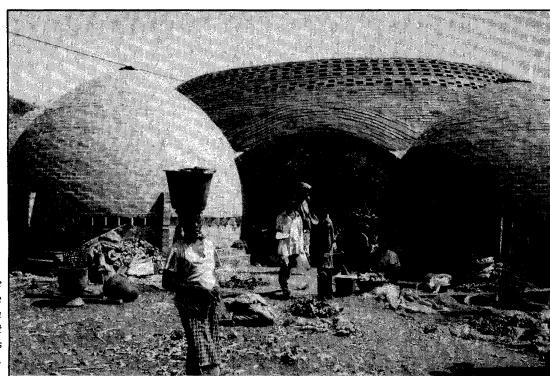
^{1.} Cunningham, A.B. (1993) African medicinal plants: setting priorities at the interface between conservation and primary healthcare. People and Plants working paper 1. Paris. UNESCO.

^{2.} Defined by the World Health Organization as "...the sum total of all the knowledge and practices, whether explicable or not used in diagnosis, prevention and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation, whether verbally or in writing. Traditional medicine might also be considered as a solid amalgamation of dynamic know-how and ancestral experience. Traditional medicine might also be considered to be the sum total of practices, measures, ingredients and procedures of all kinds, whether material or not, which from time immemorial had enable the African to guard against disease, to alleviate his sufferings and to cure himself."

WHO African Regional Office Technical Report Series, No. 1, 1976 (African traditional medicine. Report of the Regional Expert Committee), pp. 3-4.

^{3.} A Traditional Healer has been defined as "...a person who is recognized by the community in which he lives as competent to provide health care by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious background as well as on the knowledge, attitudes and beliefs that are prevalent in the community regarding physical, mental and social well-being and the causation of disease and disability."

WHO African Regional Office Technical Report Series, No. 1, 1976 (African traditional medecine. Report of the Regional Expert Committee), pp. 3-4.



Entrance to the Herboristerie Traditionelle in Medina Market on the outskirts of Bamako.

for names of specific plants used to treat illnesses like *linemenpo*. His response is similar to many I have received from other *herboristes*. I can take no offense from his perfectly reasoned response. Mr. Traoré feeds, houses, clothes and educates his entire extended family with his distinct knowledge of the healing property of specific plants. In many cases he has had to pay for this knowledge and therefore sees no reason why someone like myself should get it for free. It makes absolutely no difference to him that I will not be using the knowledge to compete with him or even make a profit from the plants somewhere else. After all, why do I want to learn about these plants? Simply for the sake of knowing?

Our visit at the *Herboristerie* comes to an abrupt end. The length of our questioning has aroused suspicion. The vice-president of the association, who occupies the adjacent stall, informs us that we must wait for the president if we want to continue talking with the members of the association. Although Mr. Sidibé talked with the president the day before to inform him of our visit, today the top man is nowhere in sight and has left no word with the association. Not wanting to offend anyone, we decide it best to search the surrounding market for other "non-member" herboristes.

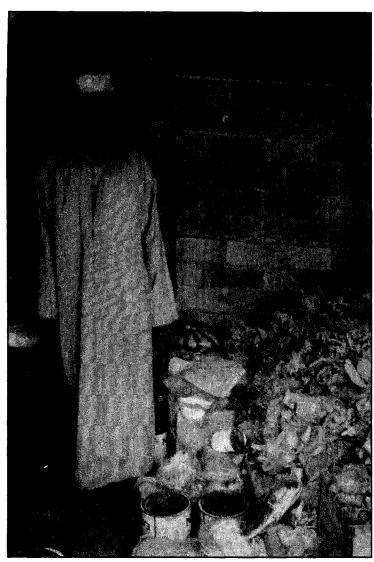
Winding our way through the narrow, trash-strewn alleys, rain-eroded paths and pools of stagnant, urine-smelling water brings to mind questions of hygiene and sickness. Can traditional medicine be any match for the diseases caused by modern, urban filth that a huge proportion of the globe's people live in? My rhetorical reflections are cut short by our arrival at herboriste Sira Djakite's shop, which offers a welcome respite from the blazing sun. Unfortunately the relief is only temporary, since the

air in Sira's corrugated metal shack heats up to a stifling high-oven temperature. Melting, I gently teeter back and forth on a wooden stool missing a leg as I watch streams of insects work their way through the piled heaps of rotting leaves, bark and roots.

The sheer clutter and disarray of Sira's shop is just about opposite to what I found at the Association's Herboristerie. Sira has been selling plants and healing people for half of her 78 years (and I am almost convinced that some of the plants at the bottom of the huge pile have been with her from the beginning). She tells me that her knowledge was originally God-given and it is her love of healing and plants that keeps her going despite heavy competition from the neighboring association of herboristes and the sporadic nature of her clients' needs. Since Sira is not a member of an association, she doesn't receive the benefits of a more hygienic work place (which could potentially make a difference in the effectiveness of her plants) or referrals from other members, yet the latter take place on a less formal basis with other nearby herboristes.

When I explain my interest in knowing about plants that women use and sell, Sira begins by telling me that men and women *herboristes* use different medicines and collect their plants in different places. Like most women who sell medicinal plants, Sira sells a full range of plants for women's health, including fertility enhancement, painful periods and venereal disease. Though she knows about plants for family planning, out of respect for her Muslim religion she does not sell these. Generally there are no fixed prices for her medicines, but a fertility treatment is about 5,000 CFA (U.S.\$10.00).

At the close of our visit, when I ask to take a picture



Mr. Traoré (standing) surrounded by his healing plants

of Sira, she responds with a proverb: "Where one fishes, one does not wash the fish." In other words, let a little time go by. Don't expect to get everything right here and now. I have come to talk with Sira about plants, yet now I walk away with a lesson in patience.

With Sira's teaching freshly in mind, we cross the road and stop to talk with herboriste Mari Traoré, who warmly invites us into a shelter where his friend smokes and dries small chunks of mutton. He has far fewer plants than either Sira or the association herboristes but makes up for this with his open, welcoming manner. After apprenticing for two years, he is taking the place of his mother who has gone back to live in her natal village. Unlike the other male, urban herboristes I have met, Mari collects some of his own plants. Some of these plants can be found in and around the city, but others require a trip of several hundred miles.

Most of the plants he sells are bought by women, largely because they are for infant illnesses. He has plants to help children walk faster (balika wului), give the child

more life force (timi timiné), and help the child grow fat (sama simba). He says that some of his plants like Gulubara (used for malaria and painful periods) and Nonchi Queue (used to prevent miscarriage) are easy to find but species like Djeue (used for self-protection against evil) are not. Mari attributes the difficulty in finding certain plants to increased urbanization, a greater number of herboristes, and in the case of Djeue, overharvest in order to prevent others from having access to the plant.

Perhaps the most striking difference between Mari and the other herboristes I have spoken with is his willingness to furnish information and his unworried manner of sharing the local Bambara names of medicinal plants with us. Later this will facilitate Mr. Sidibé's task of identifying the scientific names of the species. Knowing their names gives him a better idea of what regions the plants are coming from, how rare they are in the wild, and what types of management activities may need to be taken in order to prevent over-exploitation of the species. I think Mari is doing something positive for his trade in sharing this information for conservation purposes, but I think most of the *herboristes* simply see it as one more way the government is trying to control what they do. Before we say good-bye, we share a small plate of chewy mutton bought from his friend. With a full belly we move on to speak with Mari's neighbor, Oumou Diallo.

Oumou is a relative of Mari's and also in the medicinal plant business. She is selling few plants compared to many of the others. The ten or so species she has for sale are neatly bundled and piled on a dusty red sheet of once-transpar-

ent plastic. We join her in her shelter from the sun: a three-sided corrugated metal lean-to, which also serves as a butcher's shop. The flesh is gone, for the moment, but the residue left on the wooden chopping block is attracting hordes of flies with the sour scent of years of unwashed meat juices. All of the plants that Oumou sells are for women and children and she says that more than half of her clients come to her for *linemenpo*. This is a sickness that Oumou never saw in her village and learned only about after her arrival in Bamako ten years ago.

Oumou's tiny frame is covered with faded African cloth now starting to thin. Although she barely makes enough money to survive, she is rich in wisdom and matters of the heart. When I ask her what changes she has seen in the last ten years in regard to medicine and health, I am surprised by the directness and clarity of her response. "People are suffering from many sicknesses that they did not suffer from before. Part of the reason is over-consumption of sugar and oily foods. Also, people used to fortify themselves with plants for prevention; they didn't

use pharmaceuticals. You can see how people suffer so much now."

Oumou turns slightly and for the first time I see a small child sleeping on her back. When I ask Oumou if the baby is her granddaughter, I am overwhelmed by her response. "This baby had been thrown away on the other side of the road in a pile of trash. I found her with the umbilical cord still attached. I've raised her until now." I am fighting to keep the tears in and manage to ask if this is a common occurrence in Bamako. "It happens more often now because more girls are coming from the villages for work in the city, they are too shamed to return with a baby." Even knowing stories like this, I wonder why Sira thinks it is "wrong" to sell plants for family planning.

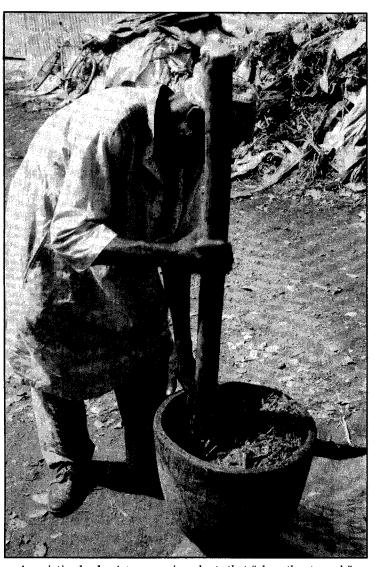
HEALERS PHARMACY

We move from the downtown streets and crowded marketplace to a relatively peaceful suburb of Bamako. Here KENEYA-YIRIWATON (Bambara for "Development of an Association for Health") is busy promoting traditional medicine and teaching its 485 herboristes and healer members about various aspects of medicinal-plant development and conservation. Associations of healers and herboristes are fairly common throughout Mali, especially in the regional town centers. KENEYA-YIRIWATON, founded in 1993, is unique in that the healers have organized to produce, package and market their products in their own pharmacy. The goal of the association and center is to promote greater collaboration between modern medicine and traditional medicine. The physical structure of the their center is less striking than the architect-designed herboriste cen-

ter and consists of a rectangular, concrete-block building with two classrooms, a plant-drying room, two consultation rooms, a plant-preparation room and a plant pharmacy.

Though traditional medicine is as old as the culture it is part of, adapting it to the modern era is a process that is in its infancy. Like a proud parent, Mr. Oumar Diallo, who is our guide and a founding member of the Association, has many dreams for the future of the center. First he would like to see a plant pharmacy in each of Bamako's six districts. He wants to publicize the center on radio and television. He would like to see more hospital doctors refer patients to the Association when they are unsuccessful with modern medicine, especially because the healers are encouraged to do the opposite. He would like to develop the 100-hectare property the Association owns as a medicinal-plant botanic garden. Above all, his most cherished wish is the creation of a school where people could come and learn to be herboristes and healers.

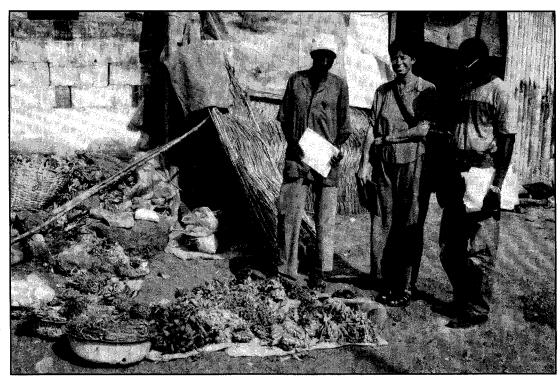
Mr. Diallo explains that the first step in becoming a



Association herboriste preparing plants that "clean the stomach"

member is a series of examinations. The prospective member must demonstrate his or her knowledge of plants by being able to identify and know the medicinal uses of at least 30 different plants. This includes identification from leaf, bark and root samples. Following the exam, which can take place over a four-month period, herboristes or healers can become members only after they have shown their sincere interest and their willingness to work and learn at the center. This means attending classes on techniques of how to collect plants in order to conserve future supplies in the wild and learning to preserve them to maintain phytotherapeutic effectiveness. Members also take courses in literacy and basic mathematics to understand the concepts of dosage and measuring. This is a skill they will be required to understand if they want to package their medicinal plant remedies commercially.

Although the association is functioning well, it is still not self-sufficient. It received start-up money from a small nongovernmental organization (NGO), which enabled it to pay the rent and buy a typewriter and a



Mari Traoré, a non-association herboriste, with the author, Mr. Sidibé and his plants at Medina market

machine that processes bark, roots and leaves into a fine powder. This year it will be funded by another NGO, "Christian Aid," which sees value in its work. But self-sufficiency is somewhere down the road. Although it has close to 500 members, the association's healers currently see only 50 people a month at the center at a price of 250 CFA (.50 cents) per consultation. Mr. Diallo thinks there should be more clients because potential patients have the advantage of easily finding a healer that specializes in their illness. Each healer that sells a processed remedy must give the center 15% of his revenues. Finally, each member pays dues of 300 CFA per month. Adding these together, the association barely covers its rent of 100,000 CFA (\$200) per month.

Mr. Diallo is very proud of the machine the association has purchased to process plants into a more refined state, but he says that processing and packaging materials are the things that the center lacks most. Currently each healer is responsible for collecting or buying medicinal plants, drying them, pounding them into a powder, making them into a syrups or ointments and then packaging them with directions for use. This is a time-consuming, labor-intensive process that could be reduced by the purchase of machines for bagging and syrup making.

Currently the center has no formal testing process to scientifically evaluate the active chemical constituents of its plant remedies. If it wishes to have something tested it sends it to the laboratory at the Department of Traditional Medicine. The center must cover the cost of testing, which is basically out of its financial reach.

Our final stop on the tour is the "pharmacy," where

powdered plant medicines are neatly package in plastic and stacked in small screened lockers, one for each healer. In each bag, a small white label bears the name of the product, what illness it is used for, how much should be taken and how many times a day. Each healer has his or her own special remedies for sale, and each sets his or her own price. The most common illnesses that people come to the center for are malaria, stomach pain, hemorrhoids and coughs. For women it is *linemenpo*, painful periods, excessive menstrual bleeding, yeast infection, amenorrhea and sterility. I notice, though, that most of the prepared medicines belong to the male healers even though half of the members are women.

KENEYA-YIRIWATON recently hosted a seminar dealing with collaboration between modern medicine and traditional medicine. Pharmacists, physicians, botanists, herboristes, traditional healers and even the Mali Minister of Health attended. Although seminars are a step in the right direction, Mr. Diallo still sees many obstacles facing the traditional healer. "How do you have an association but still allow members to practice freely? How can you control the quality of the products that the members sell? What are the rights and the responsibilities of the traditional healer?" In other words how can traditional medicine be formalized in order to maintain credibility as the availability of science-based pharmaceuticals and medicine increases?

Traditional medicine is practiced in Mali in much the same way as in Guinea: men and women maintain separate bodies of knowledge; there are numerous levels of expertise and training, with no generally accepted minimum standards; and the vast majority of people use tra-



KENEYA - YIRIWATON

Association des Thérapeutes Traditionnels et Herboristes du District de Bamako (ATTHDB)

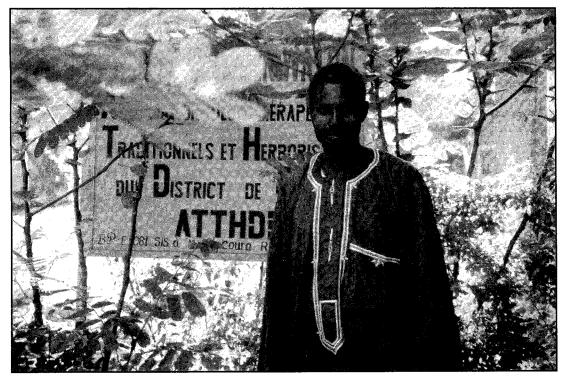
B.P : E 3081 sis à Medina - Coura Rue 10 X 19 Porte 749 Bamako

Logo of KENEYA-YIRIWATON: A traditional healer and herboriste association; the name in Bambara means "Development of a Health Association."

ditional healers. However, in my short time here I have discovered significant differences, too. Most visibly, one finds larger amounts of raw plant material on the market of the capital city, and greater numbers of herboristes. There are more associations of healers and herboristes in Mali than in Guinea, and they have discovered how to effectively solicit money from western donors. Lastly, the healers found in the capital of Bamako seem more sophisticated than their Guinean counterparts, marketing themselves and their medicines

with color advertisements in the newspapers, and incorporating plant medicines into the urban, more-literate culture by packaging the medicines and recommending dosages.

Thus far, we have explored Malian medicinals from the perspective of private practitioner and non-governmental organizations. However, the government of Mali also has a role to play. My next report will focus on its involvement in traditional medicinals.



Mr. Diallo in front of the KENEYA-YIRIWATON Center for Traditional Medicine

Index to ICWA Letters by Randi Movich

Entries refer to ICWA Letter (RM-1,2, etc.) and page, with Letter number given before each page entry

Α exchange rates 1.5 abortifacients 3.6 Liberia 1.5 agouti soup 5.2 life styles 1.4, 4.2, 5.2, 5.8, 5.11 family planning 6.3 American Refugee Committee (ARC) linemenpo (Bambara for symptoms fertility 3.6 associated with a range of sexually Forest Region 1.5 animism 4.2 transmitted diseases) 6.2, 6.4 forests and forestry 3.5 anti-poisoning 3.2 forêt sacrée 2.1, 2.5, 3.4 М architecture 6.2 Foulani 5.13 area 1.2 Macenta 1.4, 1.5, 2.1, 3.5, 5.1 Fouta Djallon highlands 1.2 maître 2.4 В France 2.2 malaria 2.3 Mali 2.3, 5.1, 6.1, 6.2 Bakema 3.1, 3.2 Bamako 5.4, 6.1 Malinké 4.1 gangué konodini (painful periods) 6.2 Bas Guinée (Lower Guinea) 1.2 Mamou 2.4 Gao 5.13, 5.14 beggars 1.4 maternal mortality 4.2 Gbanacé, Dr. Pogba 1.4, 2.1, 2.2, 2.3 Bemba 5.14 mavvnzowei 3.3 genital mutilation 5.8 Boaloiboaloi 4.5 medicinal plants 1.3 Ghana 1.5 botanical garden 2.5 medicine and health 3.2 Gilavogui, Balina 3.2 Burkina Faso 2.3 medicine, collaboration of traditional Gilavogui, Sila 3.1 and modern 6.6 GNP (gross national product) 5.5 medicine, group 6.6 Gueckedou 1.4, 1.5, 2.5 Medina market 2.3 cataplasme 3.6, 4.2, 4.3, 4.4 guérisseurs (healers) 1.3, 2.3, 2.4 midwifery 3.3, 4.1 checkpoint 5.1 Guerzé 2.1 Ministry of Health 1.3, 2.1 chemical constituents 6.6 Guinea 6.2 Mopti 5.8 childbirth 4.2, 4.7 Guinée Forestière (Forest Guinea) 1.2 Moyenne Guinée (Middle Guinea) 1.2 "Christian Aid" 6.6 Gulubara (used for malaria and painful myths and legends 3.1, 3.6 Christianity 4.2 periods) 6.4 colonialism 1.5 н Conakry 1.2, 1.3, 2.1, 2.4 Neridou 4.3 contraceptives 3.6 Harmattan 5.5 corruption 1.3 Niafounké 5.11 Haute Guinée (High Guinea) 1.2, 2.5 Cotton 5.5 N'ko (Malinké healer) 2.3 héritage 3.3 Nonchi Queue (used to prevent history 5.13 miscarriage) 6.4 nurses 1.3 de Gaulle, Charles 2.2 N'Zerekoré 1.4, 2.5, 4.3 Departement Préfectoral de la Santé Imidaasai 3.6 (County Health) 1.4 0 impotence 3.2 Department of Traditional Medicine income, per-capita 1.4 2.1, 2.2 oily foods 6.4 infant illnesses 6.4 open-air market place 1.3 Diafatabé 5.5 infusions 3.5 Ouédéno, Faya 3.2 Diallo, Oumar 6.5 Islam 5.8 Ouédéno, Saran 3.2 Diallo, Oumou 6.4 lukono 5.2 oxytocin 4.2, 4.3, 4.7 Dieké 2.3 Ivory Coast 2.3, 6.2 Diré 5.11, 5.12 Djakite, Sira 6.3 Dieue (used for self-protection against Panziazou 3.1 Kankan 2.4, 5.1, 5.2, 5.4 evil) 6.4 pirogue 5.12, 5.14 Kankou Moussa 5.6, 5.8, 5.13 doctors 1.3 pollution 1.4 Karouma, Lansana 3.3 Doulagui 4.5 population 1.4, 1.5, 6.2 KENEYA-YIRIWATON (Development of Mali 5.5 Ε an Association for Heath) 6.5 prevention 6.4 Kissidougou 5.1, 5.2 protocol 1.4 education 5.7 Koivogui, Weyma Peyma 2.4 education, professional 6.5 Koulikoro 5.4 emmenagogues 3.6

Kouyaté, Lansine 2.3

quinine 2.2

environment 1.5, 5.5, 5.13