



# GWEMBE SOUTH DEVELOPMENT PROJECT

G. S. D. P.

P.O. BOX 3, SINAZEZE / ZAMBIA

REPUBLIC OF ZAMBIA  
MINISTRY OF AGRICULTURE  
AND WATER DEVELOPMENT

GOSSNER MISSION  
FEDERAL REPUBLIC  
OF GERMANY

LEATHER WORK AND TANNING PROJECT - SINAZEZE

FINAL REPORT

Eingegangen

03. Jan. 1992

Erledigt: 89.10.92 400

GWEMBE SOUTH DEVELOPMENT PROJECT  
SMALL SCALE VILLAGE INDUSTRIES  
P.O. BOX 4,  
SINAZEZE



IMPLEMENTATION

Our tanning - leather project has received the amount of K 528,760.00 from German Embassy. This amount of money was used for the construction of a tannery and of a leather workshop as follows for:

BURNT BRICKS	K 68,386.00
BUILDING SAND, GRAVEL	K 14,645.00
CEMENT	K 181,500.00
ROOFING MATERIAL	K 99,805.00
REINFORCEMENT STEEL AND WIRE	K 41,470.00
SEWAGE	K 8,630.00
DOORS, WINDOWS	K 114,491.00
SUNDRIES	K 3,050.00
<b>TOTAL</b>	<b><u>K 531,977.00</u></b>

Find enclosed all receipts issued.

The building materials were bought locally and the construction of the two buildings were completed on self help basis by our bricklayers and carpenters, they were assisted by the members of the leather and the tanning project. The tannery exists of a workshop (6,90m x 5,10m) a store room (3,60 x 5,10m) and of a roofed veranda (5,10m x 3,00m). For the water supply a well of 15m in depth was dug and provided with a concrete casing. The leather workshop (6,20m x 5,20m) is provided with a store room (3,10 x 4,60m) and a roofed veranda (6,20 x 3,00m). See enclosed building plans! The amount of money received is spent and all materials required are bought by now. The construction of the two buildings is completed except some minor final work is left. Hopefully early January 1992 the tanners and leather workers can occupy their workshops and can start operating from there.



OBJECTIVES ACHIEVED

The objective of the tanning and leather programme was to create the opportunity to generate income on a regular basis for young unemployed people. For this purpose fourteen young people (seven women and seven men) were trained in tanning and leather work/shoe-making. The expenses for the training were covered by the Gossner Mission. The required tools and handy craft gear were financed with the help of the German Volunteer Service. With the fund received from the German Embassy it became possible to build a tannery and a leather workshop in order to accommodate both groups of artisans well. With the completion of the buildings the group of tanners and the group of leather workers can start working at full capacity.

*Wolfgang Dietz*  
W. DIETZ  
SSVI ADVISOR

*S. D. Munsanda*  
S.D. MUNSANDA  
GSDP CO-ORDINATOR

17-12-91



ATE	REF	DETAILS	AMOUNT	BRICKS	SAND	CRAVEL	CEMENT	ROOFING	REINF.	SEWAGE	WINDOWS	DOORS	SUMMIES
5-07-91	1	100 P. of CEMENT	64.000				64.000						
5-07-91	2	30 ROOFING SH. 3M	37.500					37.500					
5-07-91	3	23 "	3M	32.430				32.430					
5-07-91	4	" "	2M	8.800				8.800					
5-07-91	5	WIRE, BARBED WIRE		8.060					8.060				
5-07-91	6	50 P. of CEMENT	32.000				32.000						
6-08-91	7	50 P. of CEMENT	45.000				45.000						
6-08-91	8	LOCK, HINGES	10.760								10.760		
6-07-91	9	BOLTS		1400					1.400				
15-08-91	10	WINDOW FRAMES, LOCKS	48.045								48.045		
15-08-91	11	GLASS PADS	18.560								18.560		
26-08-91	12	BURNT BRICKS	12.402	12.402									
13-08-91	13	PLANKS		480							480		
12-08-91	14	WELDING OF SCREWS		470							470		
30-08-91	15	30M. SISAL ROPE	2100								2100		
01-08-91	16	4 SEEDL NIDES	6.780							6.780			
29-08-91	17	WINDOW FRAMES, DOORS	19.260								19.260		
16-08-91	18	50 GUMBOLDS	12.500					12.500					
16-09-91	19	50 P. of CEMENT	40.500				40.500						
17-09-91	20	REINFORC. STEEL	32.010					32.010					
17-09-91	21	WINDOW FRAMES	12.594								12.594		
20-09-91	22	2. DOORFRAMES	2.972								2.972		
25-09-91	23	BURNT BRICKS	22.860	22.860									
03-10-91	24	3 TRUCKLOADS SAND	5.150		5.150								
14-10-91	25	2 " CRAVEL	3.200		3.200								
14-10-91	26	BURNT BRICKS	23.274	23.274									
			503.102	58.536	8.350	181.500	91.230	41.470	6.780	112.191	3.050		



DATE	REF.	DETAILS	AMOUNT	BRICKS	SAND GRAVEL	CEMENT	ROOFING MATERIAL	REINF. STEEL	SEWAGE	WINDOWS DOORS	SUPPLIES	
		CARRIED FORWARD	503.107	58.536	8.350	181.500	91.230	41.470	6.780	112.191	3.050	
6-10-91	27	3 TRUCKLOADS GRAVEL	4445		4.445							
2-10-91	28	WELDING WIRE GARDEN FENCE	1.650								1.650	
5-10-91	29	10 M. PLASTIC PIPE	1.850						1.850			
8-10-91	30	WELDING WIRE GARDEN FENCE	650								6.50	
6-11-91	31	10 BURNT BRICKS	9.850	9.850								
6-11-91	32	1 TRUCKL. SAND	1.850		1.850							
7-11-91	33	NAILS/WOOD PRESERV.	8.575				8.575					
		TOTAL	531.977	68.386	14.645	181.500	99.805	41.470	8.630	114.491	3.050	



Eingegangen

18. Sep. 1991

Erledigt:.....

APPLICATION

FOR TANNING AND LEATHER WORK IN SINAZEZE

GWEMBE SOUTH DEV. PROJECT  
SMALL SCALE VILLAGE INDUSTRY  
P.O. BOX 4  
SINAZEZE/ VIA CUONA



## 1. INTRODUCTION

In Sinazeze, the area around and along the Maamba road and Naumba a large quantity of skins and hides can be easily collected for tanning. Lots of goats and cows are slaughtered in the area, but most of the skins and hides are not used economically. Two different tanning and leather work experts (SIPD and the tanning and leather work section of the Chipata School for Continuing Education) came to the conclusion that tanning and leather work is feasible in Sinazeze. All the required raw materials for vegetable tanning beside hides and skins the tanning agents are available in and around Sinazeze. In order to use the leather more profitably for the project and to create more jobs in the region the tannery has to work in connection with a leather workshop. The proposed projects can create a considerable amount of jobs. Five to seven young men and women could work permanently in the tannery and another five to seven in the leather workshop. All of them should work on self employment basis right from very beginning of the projects.

Sinazeze Craft Centre is an attractive place for a tannery and a leather workshop, because it is located directly at the tar road to Maamba therefore collection of materials and business contacts will be easy. Vegetable tanning does not harm the environment. The wastes like lime and leached out bark can be used for compost making. Waste water can be used for the garden. No chemicals will be used at all.

## 2. IMPLEMENTATION

### 2.1) Tannery

The proposed production capacity for tannery will be six to ten goat skins and one to two cattle hides per day. The tanning process will be done on a vegetable basis. The tanning agents as the bark of the Mukwa tree and the fruits of the Mweeye - (Kaliphangala) tree etc. are available in and around Sinazeze. The Mukwa bark can easily be collected from local plank cutters. Till now there has been no use for bark. Like another component in tanning can be bought from commercial traders in Choma. The whole tanning process will be done by simple tools without any machines. The tannery will consist of a workshop of  $50\text{ m}^2$  with six pits soaking, deliming and tanning, a storeroom of  $24\text{ m}^2$  and a roofed veranda of  $15\text{ m}^2$ . The required water will be provided by a well. It is proved that there is sufficient enough water all over the year at Sinazeze Craft Centre. The tanners of the project will collect their raw materials by bicycles provided by the project.

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2.2) Leather workshop

The products of the tannery, finished skins and hides, will be sold to and utilised by the leather workshop. This leatherworkshop will produce leather goods like shoes, bags, belts harnesses etc. The production will be done by simple tools included a manual flatbed sewing machine.

The unit will sell its produce through a crafshop on the local market. The leather workshop will consist of a workshop of 16.5 m<sup>2</sup>.

2.3) Training

Due to lack of skilled personell in tanning and leather work/shoemaking seven candidates will be trained in tanning and seven other in leather work/shoemaking. Six young women and eight young men from Sinazeze area will under go a three month course organized by the Chipata School for Continuing Education. The following subjects will be taught for: tanners a) skin preservation and processing tanning agents) b) fleshing liming c) tanning etc, and for leather workers: a) making patterns for all kinds of leather products e.g. shoes, bags, belts, b) leather technics c) use of tools d) introduction with an accent on quality and design.

3. OBJECTIVES

- a. to utilise natural resources, hides, skins, tanning agents like barks and fruits of certain trees.
- b. to produce finished hides and skins.
- c. to produce leather products like shoes, leather bags and belts etc.
- d. to offer a professional service of shoe repair.
- e. to give unemployed school leavers a chance to receive a professional training.
- f. to create opportunities to generate income on a regular basis.



4. COST CALCULATION FOR TOOLS, HANDICRAFT GEAR  
AND FURNITURES

4.1. For Tannery

4 Bicycles	29,394.00
2 Wooden mortars	2,000.00
4 Tanner beam	2,400.00
1 Leather staker	2,494.00
10 Tanning knife	3,500.00
4 Metal buckets	3,400.00
6 Drying Frames	9,000.00
1 Tool cupboard	12,000.00
1 Handpump	18,000.00
2 Drums	8,000.00
7 Work seats	6,300.00
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Total	K 96,988.00
40% =	2425 DM

4.2. For Leather Work

5 Hammers	2,500.00
5 Stanley knifes	2,125.00
5 Scissors	1,455.00
14 Plastic basins	14,000.00
5 Rev. punches	4,250.00
1 Sewing Machine Leather	80,000.00
5 Iron rulers	6,000.00
4 Working tables	14,000.00
2 Cutting tables	8,000.00
7 Work seats	6,300.00
1 Tool cupboard	12,000.00
	<hr/>
Total	K 150,630.00
A 40% =	3766 DM

To be purchased in Europe

20 Pairs of lasts	1,800 DM
7 Lasting Pliers	350 DM
7 Glue dispensers	210 DM
10 Awls	140 DM
Porto CA	350 DM
	<hr/>
B Total	2,850 DM

Total Overall

4.1. Tanning	2,425 DM
4.2. Leather work	A + 3,766 DM
	B + 2,850 DM
Total overall	<hr/> 9,041 DM



5. FINANCIAL PLAN

Small scale Village Industries (SSVI) is one programme under Gwembe South Development Project (GSDP), which is a joint venture of the Ministry of Agriculture of GRZ and Gossner Mission Germany. Gossner Mission finances the operations of SSVI, but the total amount needed for the leather projects exceeds the funds which can be made available by Gossner Mission.

Gossner Mission financed the training of 7 Tanners and 7 Shoemakers (7 women and 7 men) with K150,000.00 and the German Embassy financed the well and building of the tannery and the building of the leather workshop with K528,000.00. The project applies from the GVS to pay for the tools, handicraft gear and furniture for the tannery and the leather workshop 9041 DM.

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P. Dicte  
ADVISER  
SMALL SCALE INDUSTRIES

*S. D. Munsanda*  
S. D. Munsanda  
GSDP COORDINATOR



Eingegangen

28. März 1991

Erledigt:.....

PROJECT PROPOSAL

FOR TANNING AND LEATHER WORK IN SINAZEZE

GWEMBE SOUTH DEVELOPMENT PROJECT

SMALL SCALE VILLAGE INDUSTRIES

P.O. Box 4

SINAZEZE/ VIA CHOMA



## 1. INTRODUCTION

In Sinazeze, the area around and along the Maamba road and in Maamba a large quantity of skins and hides can be easily collected for tanning. Lots of goats and cows are slaughtered in the area, but most of the skins and hides are not used economically. Two different tanning and leather work experts (SIDO and the tanning and leather work section of the Chipata School for Continuing Education) came to the conclusion that tanning and leather work is feasible in Sinazeze. All the required raw materials for vegetable tanning beside hides and skins the tanning agents are available in and around Sinazeze. In order to use the leather more profitably for the project and to create more jobs in the region the tannery has to work in connection with a leather workshop. The proposed projects can create a considerable amount of jobs. Five to seven young men and women could work permanently in the tannery and another five to seven in the leather workshop. All of them should work on self employment basis right from very beginning of the projects.

Sinazeze Craft Centre is an attractive place for a tannery and a leather workshop, because it is located directly at the tar road to Maamba therefore collection of materials and business contacts will be easy.

Vegetable tanning does not harm the environment. The wastes like lime and leached out bark can be used for compost making. Waste water can be used for the garden. No chemicals will be used at all.

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### 2.2) Leather workshop

The products of the tannery, finished skins and hides, will be sold to and utilised by the leather workshop. This leather workshop will produce leather goods like shoes, bags, belts harnesses etc. The production will be done by simple tools included a manual flatbed sewing machine.

2/...d..



The unit will sell its produce through a craftshop on the local market. The leather workshop will consist of a workshop of  $16.5\text{m}^2$  a storeroom of  $9.5\text{m}^2$  and a roofed veranda of  $13.5\text{ m}^2$ .

### 2.3) Training

Due to lack of skilled personnel in tanning and leather work/ shoemaking seven candidates will be trained in tanning and seven other in leather work/shoemaking. Six young women and eight young men from Sinazese area will undergo a three month course organized by the Chipata School for Continuing Education. The following subjects will be taught for: tanners a) skin preservation and processing tanning agents b) fleshing liming c) tanning etc, and for leather workers: a) making patterns for all kinds of leather products e.g. shoes, bags, belts, b) leather technics c) use of tools d) introduction with an accent on quality and design.

### 3. OBJECTIVES

- a. to utilise natural resources, hides, skins, tanning agents like barks and fruits of certain trees
- b. to produce finished hides and skins
- c. to produce leather products like shoes, leather bags and belts etc.
- d. to offer a professional service of shoe repair
- e. to give unemployed school leavers a chance to receive a professional training
- f. to create opportunities to generate income on a regular basis



1. Cost calculation for

4.1. Tannery

a. Training	K111,800.00
b. Building	K190,000.00
c. Well/pump	K 60,000.00
d. Tools/handecraft gear	K 48,800.00
e. Transport 4 bicycles	<u>K 28,000.00</u>
	<u>K440,000.00</u>

4.2. Leather work

a. Training	K111,800.00
b. Building	K128,500.00
c. Tools/handecraft gear	<u>K109,265.00</u>
	<u>K350,000.00</u>

The total overall costs for both tannery  
and leather work are K790,000  $\div$  33 = 24 000 DM

5. FINANCIAL PLAN

Small Scale Village Industries (SSVI) is one programme under Gwembe South Development Project (GSDP), which is a joined venture of the Ministry of Agriculture of GRZ and Gossner Mission Germany. Gossner Mission finances the operation SSVI, but the amount needed for the leather projects exceeds the fund which can be made available by Gossner Mission. Therefore the programme ~~request~~ for funds from other donors.

Winfried Diets  
ADVISER/SMALL SCALE  
VILLAGE INDUSTRIES

6th March, 1991

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INTRODUCTION

The main objective of the SSVI Programme is to identify and organize local artisans and to assist them with establishing and monitoring local production units. Where it is required the programme constructs workshop buildings for the artisans, it also gives initial loans for buying tools and handicraft gear. In order to improve and upgrade their knowledge in crafts manship and management the programme organizes and provides further training facilities for local artisans if required. It further organizes and finances where required vocational training for young unskilled people in form of apprenticeship under existing local artisans or in form of crush courses. The programme also intends to achieve the creation of new jobs on selfemployment basis as well as to assist local production units organizing their raw material supplies.

STAFF POSITION

The SSVI Programme is advised by an expatriate from the German Volunteer Service. No more staff is employed at present, but it is planned for the second half of 1991 to find and employ a counterpart (Zambian by nationality) for the programme.

CRAFT CENTRES

Since SSVI Programme aims at initiating and setting up workshops in various trades that are required in rural areas, a number of them should be concentrated in Craft Centres. Thus the services of different trades and workshops may be claimed at one place, and cooperation among different artisans will be easier. Two of these craft centres have been started by SSVI, one in Sinazeze and one in Syabaswi.

SINAZEZE CRAFT CENTRECarpentry workshop

The Tusole Woodwork Furniture Group came into existence two years ago (five skilled carpenters). The group operates on self employment basis, it mainly produces furniture, doors, windows and door/window frames. The group managed to repay a loan given for tools and handicraft gear in time last year and received an additional loan K50,000.-- for the same purpose totally from the SSVI programme. Tusole Woodwork Furniture has accepted to train four carpentry apprentices. This apprenticeship will take nine to twelve months. The Tusole Woodwork Furniture Group didn't have a workshop, but used a shelter at the GSPP camp temporarily. In order to accommodate the group well SSVI constructed a workshop which was occupied in June. After four trainees had been accepted workshop had to be extended by a shelter because it was not meant for more than 6 artisans.



#### Bicycle Repair Workshop

The SSVI Programme opened a bicycle repair workshop and accommodated a skilled mechanic on self employment basis. The workshop started operating in November. The demand for its services is big due to the big number of fishmongers and vendors who buy fish from Lake Kariba bringing it by bicycle to Sinazeze for sale. The workshop has continuously a good number of jobs to do by mending and repairing the fleet of bicycles of the local people and of the traders.

#### Rural Metal Workshop

There is high demand for having a rural metal workshop in Sinazeze. There are hardly any blacksmiths or tinmen to be found in the area. The few local blacksmiths are also committed to other activities like agriculture or trading on a low level. SSVI constructed a workshop building but could not start operating the workshop due to the fact that those blacksmiths who applied for operating it, showed no interest in running the business on self employment basis. (Their whole approach to the project was not satisfactory even their skills were not bad.) It is planned to find three or four young people, that seem to be able to run their own business and to send them for a training to the FAO Agriculture Mechanization Project or to Katopola Provincial Engineering Unit, both in Chipata.

#### Tanning and Leather Work

Feasibility studies of two different Tanning/Leather work experts (SIDO and tanning/leather work, section of Chipata School for Continuing Education) came to the result that tanning and leather work is possible in Sinazeze. All required materials for vegetable tanning (skins, hides tanning agents) are available in and around Sinazeze. Lots of animals are slaughtered in the area including Maamba, but most of the skins and hides are not used economically, on the other hand there is a big demand for shoes and leather products.

Sinazeze Craft Centre seems to be a place for establishing a tannery and a leather workshop. Located directly at the Maamba road, collection of materials as well as business contacts will be easy. Water, a very important factor for tanning, will be provided by a well which was sunk at the Centre. Due to lack of skilled tanners experienced in vegetable tanning and leather work, the SSVI programme will send seven tanners and seven leather workers/shoemakers for a three month course to the Chipata School for Continuing Education in 1991. In an interview six young women and eight young men were chosen already.

By the end of 1991 the two groups hopefully will start operating. Till then SSVI will build a tannery and a leather workshop.

#### SYABASVI CRAFT CENTRE

##### Rural Metal Workshop

After the Siatwiinda Irrigation Scheme ceased to be part of Gwembe South Development Project its workshop (financed by Gossner Mission) moved to Syabaswi under the umbrella of SSVI. The mechanic now works on self employment basis.



#### Carpentry workshop

With the Chief and the local authorities it was agreed to open a carpentry workshop at Syabaswi, four young men from Syabaswi started in the middle of the year, a nine to twelve months apprenticeship in Sinazeze with the Tusole Woodwork Furniture group. This group will hopefully be able to start its own carpentry workshop by the end of 1991. The group will get the assistance of the SSVI Programme - initial loans for tools and the provision of a workshop on tenancy basis. The group should be under the supervision of the programme at least for a duration of two to four years in terms of craftsmanship and management.

#### Siameja Carpentry workshop

A rural carpentry workshop is planned at Siameja, Four apprentices from that area started their training under a local carpentry group at Siazwela in July. At the end of 1991 the group will start a carpentry workshop on self employment basis. The group will start under the same conditions like the Syabaswi Carpentry Group.

#### FURTHER TRAINING COURSES FOR ARTISANS

With SIDO and the Trades Training Institute Mawagali Choma SSVI Programme financed and organized in cooperation a three days workshop "Pricing of carpentry Products" for 15 local carpenters in April.

In cooperation with the Forestry Department Sinazongwe another workshop for carpenters and plank cutters about Forestry law conditions for cutting trees (licensing system) was held in May.

#### FUTURE PLANS

By the end of 1991 two new carpentry groups-one in Syabaswi and one in Siameja- and one tanning and one leather work group in Sinazeze will have come into existence. For those four groups workshop buildings will be built and sources to finance their tools and handicraft gear will have to be found. For the rural metal section at Sinazeze training is still to be organized tools and simple hand operated machinery will be made available.

By the end of 1991 SSVI will supervise three already existing and five new working groups! They should be supervised and monitored by the programme for at least three to four years. Three upgrading courses for carpenters (cabinet making, roof construction and a business/management course) are planned for 1991. It is aimed for the carpentry apprentices to organize three to four additional training courses. These courses are planned in cooperation with the Trades Training Institute Mawagali Choma, TVTC Kalulushi and Samfya Youth Skills Training Centre.

*Initial Draft*



Eingegangen

12. Dez. 1990

Erledigt:.....

## THE PROSPECTS FOR SKIN/HIDE TANNING AND LEATHERWORK IN SINAZEZE

Gwembe South Development Project, Small Scale Village Industries

### Natural Resources

In Sinazeze an abundance quantity of domestic animal skins/hides can be easily collected for tanning. Skins/hides as goat and cow are available for processing.

### Vegetable Tanning

Also in Sinazeze the tanning agents as Kalumpangala, Mukwa etc, are available. Research found valuable sources of the tanning in these trees species.

### The General Aims of the Project

- a) To create employment opportunities in the District
- b) To utilise and mobilise the idling human and natural resources e.g. labour, skin and hides
- c) To provide jobless school leavers with opportunities for skill training
- d) To produce finished skins/hides and leathercraft

### Allocation

The mentioned tannery can be established in Sinazeze if water supply from the well is sufficient. This place is very attractive because it is situated on the main tar road where other projects are like the carpentry and repair shop (transport and market wise). As well a possibility is to establish the tannery in Lake Nkandabbwe in Sinazeze. Water tests proofed that this lake water is suitable for tanning.

1. BA 2. R. *158/m*
2. FG FH 2. Q. *2/.....*
3. " SOT 2. R.
4. Kopie W. Dicte
5. z.d. A. *Pass 8/11*

### Training Programme

The first step will be to select "Tanners" for the course in the following subjects:

- Skin preservation and processing tanning agents
- Fleshing, liming
- Tanning etc

Secondly, a group of five trainees will be selected for a course in leatherworks. They will be taught how to make patterns for all kinds of leather articles (shoes, bags and belts etc).

Tools and leather technics will also be introduced with an accent on quality and design.

Above mentioned training programme can be done in Chipata School for Continuing Education.

In a meeting with my Headmaster Mr Zimba, it was approved that the five trainees could come if they could provide their own accomodation. Accomodation and pots and pans etc. could be provided by The Gossner Mission. A second possibility is to give the leatherwork course in Sinazeze if the necessary tools are available. The course will take one month.

This course could be given in one of our term breaks. Arrangements have to be made with the headmaster from my school and the G.V.S.

### Employment Generation

*no objection!*

*681*

The mentioned idea will generate a considerable amount of jobs. Five people (male/female) can be employed permantly in tanning process after training, as well some people will be engaged in collecting tanning agent. Five to six people can be employed in producing leathercraft articles.

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### Marketing

The tannery will supply first of all the leatherwork unit in Sinazeze.

The leatherwork unit will find an outlet to the craftshop or local market, besides his, leather for upholstery (leather can be used in the carpentry for covers for relaxing chairs etc).

The following steps are recommended to start the project:

- Establishment of the buildings
- Purchase equipment for the project

### Price Calculations per skin

#### Direct Costs

1 skin	KW	30.00
$\frac{1}{2}$ Kg lime		1.50
Vinegar		5.00
$2\frac{1}{2}$ Kg bark and transport		5.00
100cc cooking oil		5.00
100Ltrs water (N/A at the moment)		2.00
		48.50

#### Fixed Costs

Workshop estimated	20.00
Tools	15.00
	83.50

Value of 1 skin (goat)	US \$ 6.00 =
(Minimum world market price)	KW 230.00
Remaining for labour per skin	KW 146.50

Calculation cost for one pair of mocassin.

1

Skin average of a goat skin +- 70 dm squared ( 7.79 feet)  
KW 230.00 divided by 70 dm squared = KW 3.28 per dm squared.

Small size 9

upper leather 10 dm squared x KW 3.28	32.80
insole leather 4 dm squared x KW 3.28	13.12
rubber soling (tyre flap)	80.00
nylon thread	15.00
glue	10.00
sand paper	15.00
nails	25.00
laces	10.00
	<hr/>
	Material cost KW
	200.92
	<hr/>

Labour depends on production

#### Budget Estimated for the Programme

Tools, equipment for the tannery (as mentioned in my book  
"Real Vegetable Tanning".

4 fleshing knives	KW 2500.00
14 basins small size	11200.00
2 buckets	700.00
1 small plastic container	150.00
4 unhairing knives	2500.00
2 stanly knives	450.00
2 small shavers	2000.00

2 sheets plywood ( 120 x 120) 1500.00

Selfmade equipment (carpentry)

6 frames for drying

4 tanner beams

1 stake

2 wooden horses

2 boarding tools

Laboratory equipment

2 Baume meters (one as a spare) 3000.00

2 Ph indicators + dropping bottle 2000.00

Steel nails with support (self made)

Tools, equipment for leatherworkshop

One manual flatbed sewing machine 40000.00

5 rotary punchers @ 750.00 3750.00

5 lasting plyers @ 550.00 2750.00

5 hammers @ 350.00 1750.00

5 scissors @ 250.00 1250.00

10 knives @ 350.00 3500.00

5 hand awls @ 150.00 750.00

10 pair of shoe lasts -

5 iron rulers @ 275.00 1375.00

5 glue dispensers @ 500.00 2500.00

Selfmade furnishing for the workshop

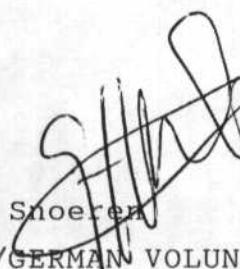
5 workseats

4 work tables

2 cutting tables

6. V. 1990  
BEGUNNEN  
DURCH

- Vegetable tanning does not harm our environment, if we are careful with our trees. The wastes like lime and leached out bark can be used for compost-making. Waste water can be used for the garden.
- Vegetable tanning can be done on a very small scale with simple tools. There is no need for any machines. Even for making larger amounts vegetable tanning is a good method.
- We can influence the quality of the leather in many ways as we will see. The quality depends on skill and the care taken pays back immediately by good leather.

  
Jan Schoeren  
for/GERMAN VOLUNTEER SERVICE

22/10/90

Eingegangen

14. Nov. 1990

Erledigt

PLANNING WORKSHOP 1990 - 1991.

SMALL SCALE VILLAGE INDUSTRIES

Held on 1st of February 1990 from 9.30hrs till 15.30hrs  
in the meetingroom of Gwembe South Dev. Project, Sinazeze.

PARTICIPANTS

1. Mrs. Pasi  
Chief Development Officer, Maamba Collieries
2. Mrs. Sandonda  
Dept. for Marketing and Cooperatives
3. Mr. Chavula  
Businessman Sinazeze
4. Mr. Sakajila  
Regional Manager, S I DO
5. Mr. Munandalu  
Officer in charge, Fisheries Department Sinazongwe
6. Mr. Siakabanze  
Carpenter, Tusole Woodwork Furniture Sinazeze
7. Mr. Syankunguya  
Carpenter, Tusole Woodwork Furniture Sinazeze
8. Mr. Neite  
Incharge of Read programme, GSDP
9. Mr. Masowe Chairman  
Coordinator GSDP
10. Mr. Schumacher  
Adviser VSP
11. Mr. Diete Secretary  
Adviser Small Scale Village Industries GSDP

NOT PRESENT

1. Mr. Mwangu with apology  
Livestock Officer, Veterinary Dept. Sinazongwe
2. Mr. Syapwaya  
Ward Chairman and Businessman Sinazeze

2/... cont...d



AGENDA

- I. Prayer
- II. Chairman's Opening Remarks
- III. Introduction of participants and projects they work in
- IV. General discussion over Small Scale Village Industries
- V. Fields and trades where S.C.V.I. should initiate and support projects
- VI. Prayers

II. CHAIRMAN'S OPENING REMARKS

The Chairman opened the workshop and welcomed the participants and thanked them for coming. He mentioned the importance of such a workshop for the SSVI programme.

III. INTRODUCTION OF PARTICPANTS

The participants introduced themselves to the workshop and gave a brief information about their profficienal background and the work they are doing. (see participants)

IV. GENERAL DISCUSSION OVER SMALL SCALE VILLAGE INDUSTRIES PROGRAMME

SSVI projects should produce goods within and for the rural society. They have to concentrate on making use out of local resources and to produce mainly for the local market. From the beginning projects should be independent from on own transport and concentrate on local transport. The products have to find the acceptance of the local consumers.

For participating artisans training and upgrading training is important. But this is only the first step. Especially if it comes to start with school leavers a starting capital (tools, handy craft gear and if required a workshop) have to be provided on lean basis. After all the groups need a supervision for a period of at least three to four years. This supervision is most important for the success of the programme. The programme should initiate and set up small groups of maximum for to six members for self employment.

・6000年文化の土壌

GOALS OF THE COUNCIL OF THE VATICAN II

It was critisized that the most organisations ignore women but support men. SSVI should support women and try to initiate women projects.

**V. FIELDS AND TRADES WHERE SSVI SHOULD INITIATE AND SUPPORT PROJECTS**

**1) Food processing**

**(a) Food conservation**

Food conservation in terms of tinning and bottling food was found to complicated and therefore unsuitable to start with with a group of SSVI. A regular supply of the required tins and bottles is a bottleneck and difficult to manage for a local group form the valley. Such projects may be considered after sometime.

**(b) Fish processing**

Fish drying is sufficiantly is done by local fishermen, for tinning fish the same applies like to tinning food.

**(c) Production of drinks**

It was mentioned that tamarine (busika) which grows in the valley unique in Zambia, is suitable for preparing drinks. But busika is only seasonal available for a short period of time. It doesn't seem to be suitable for a production exceeding domestic capacity.

**2) Woodwork**

**(a) Carpentry**

There is quite a good number of qualified carpenters around Sinazese and Sinazongwe. For them upgrading courses should be organized and held where required. The advier for SSVI announced the plan of opening two new carpentry workshops, one in Syabaswi and one Siameja within the next year. Young people from Syabaswi and Siameja shall be chosen by SSVI and brought into existing carpentry groups for apprenticeships.

**(b) Roof construction**

Since there is a demand of carpenters skilled in roof construction, the existing carpentry groups which are not experienced in this field should get an additional training.



A training course in roof construction should be organized for them by SSVI.

(c) Boatmaking/repair

The two boatmakers around Sinazongwe cover the requirements of local market.

3) Tailoring

The number of existing tailors seems to be sufficient enough. A further training in cutting and management courses might be necessary for them.

4) Pottery

It was pointed out that the sale of pottery in Gwembe South is handled by Tongacrafts.

5) Leather work

A great number of goats and cows are slaughtered in Gwembe South. The majority of these skins and hides are not used at all but wasted. On the other hand there is a big demand of shoes and leather ware. A good number of jobs could be created on tanning and leather work in case it would be feasible in the valley.

The adviser for SSVI will liaise with the leather department of SIDO and arrange for feasibility study.

6) Metal work

The workshop emphasized the importance of rural metal-workshop in the valley. The workshop was informed about the plan of SSVI to open a metal workshop at Sinazeze Craftscentre. Several local blacksmiths have shown interest in the support of SSVI. But there is still a further demand of workshops at Kanchindu, Siameja and Kafwambila. It has to be considered by SSVI which kind of upgrading courses should be planned for blacksmiths and metal workers.

7) Weaving

The adviser for SSVI mentioned that VSP plans to open and run a weaving project.



8) Building

(a) Bricklaying/Maisonary

In and around Sinazeze is a good number of skilled and qualified bricklayers. They all worked under Gwembe South Builders and reached a good professional standard. They are hired by private and public clients if required.

In the present no steps or actions are to be taken to promote the trade.

(b) Block and Brickmakers

The knowledge about block and mainly brickmaking is known by quite a number of people. Block and brickmakers are either hired by clients or they produce and sell on their own.

In Sinazeze, Nkandabbwe and Maamba where coal is available brickmakers should be taught by SSVI how to fuel their kilns by coal instead of using firewood, in order to contribute towards saving the environment. This should be done by organizing a special workshop for brick burners.

9) Poultry/Mash production

Poultry is a good income generating activity, but it requires a regular supply of mash if it comes to growing hybrids, which is quite a problem. It was suggested to start a mash production in combination with poultry project. Some of the ingredients seem to be available in the valley (e.g. oil cakes and maize grains) A proper formula for composing of mash has to be worked out by an expert.

10) Soap production

Soap production depends on import of caustic soda from Botswana. The bottleneck is the import of the ingredients. If feasible it would be a good project for women to start with.

6/..cont...d



VI. CLOSING REMARKS

The chairman thanked all members participating in the workshop for taking part and for their fruitful contributions and their concern in the welfare of the programme.

The adviser for SSVI programme emphasized the importance for the programme of having an advisory committee. He introduced the idea to the workshop. The Advisory Committee should not be a decision making body, but should bring in practicable proposals, ideas and advises and a feed back to the programme and the adviser. An advisory committee would guarantee a better continuation of the programme in case of a personal changes of the adviser and it would channel and bring in the interests of the public and the community into the work of SSVI. All participating members agreed with to establish an advisory committee for SSVI programme and to continue their work as members of the future advisor committee. Further members for the advisory committee can be chosen if required or wanted. The adviser was asked to call for meetings if necessary after 3 to 4 months. The meetings should take place afternoon time and should not take longer than 2 to 3 hrs of duration.

CHAIRMAN

DATE

SECRETARY



# Rural Tannery Profile for Gossamer

Mission in Maamba, Sinazeze areas.  
Sinazeze areas.

Sinazeze  
Etagogen

24. Aug. 1990

Erledigt:.....

## Introduction

The are enough hides and skins in this area for a small rural tannery with a capacity of 10 skins and 2 hides per day. The finished product, which is Vegetable tanned leather, will be utilised by a second group in the same unit which will be producing leather goods e.g. Shoes, belts, bags etc.

### 1. PLANT CAPACITY

The proposed production capacity for this unit will be as follows:

	<u>per day</u>	<u>per month</u>	<u>per Annum</u>
Cattle hides	2	50	600
Goat skins	10	250	3000

- Number of working days.

25 days / month

300 days / annum

### 2. Products

a) Cattle hides will be processed to sole leather.





b) Coat skins into upper leather.

### 3. Location and Site

The proposed tannery will be set up in Siagangwe. The area's coat population is higher than the other two areas. Water supply if a bore hole is sunk would be adequate.

#### Building

The client will submit estimated cost of the building. The building should be large enough to house 6 pits. The measurements for the pits are as follows:

2 Soaking and Liming pits  $4.5 \times 1 \times 1$  m.

2 Deliming Pits  $2m \times 2m \times 1m$

2 Tanning Pits  $1.5m \times 1m \times 1m$

There should be a provision for expanding the tannery to 4 more pits.

5

### Raw MATERIALS

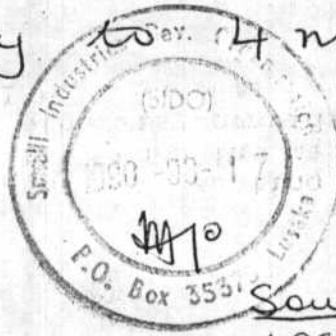
Product A

Raw material

Cattle hides

Cost (K)

Source  
Local  
within the  
area.





## Training Programme

Training Programme for Sido Registered entrepreneurs, the fees are as follows;

① As Sido client, per day = K100.

② The client should meet all the expenses for the Sido officer who will conduct the training programme.

At present night allowance is = K1200/night

The training programme takes One (1) to one and half (1½) months.

Therefore, for ~~30~~ 30 or 45 days the

amounts are:

(i) Training fees for 30 =  $K100 \times 30 = K3000$   
or  $100 \times 45 = K4500$

and (ii) Night allowance =  $K1200 \times 30 = K36,000$   
or  $K1200 \times 45 = K54,000$

OR Alternatively, lodging and food may be provided to the officer who will conduct the training. In this case, the officer may be given an allowance of around K100 per day.

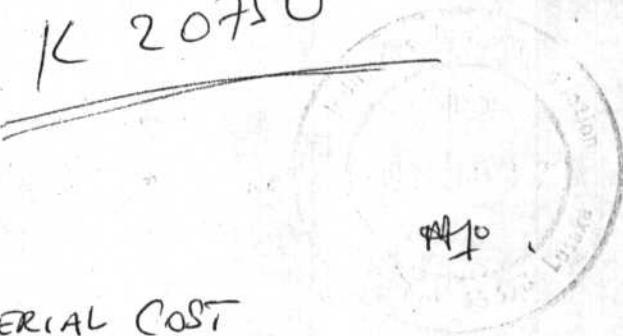




# MACHINERY & EQUIPMENT COST

TOOLS <del>MACHINERY</del>	UNIT COST	TOTAL COST	SOURCE
4 FLESHING KNIFE	K 150	K 600	GALCO, LENCO MALOBA
4 HUNTING KNIFE	K 150	K 600	4 4 4
3 BEAMS	SELF-MADE		
1 WOODEN HORSE	SELF-MADE		
1 WEIGHTING SCALE	K 15.000	K 15000	Avary (2)
5 PLASTIC BUCKETS	K 250	K 1500	HARDWARE SHOP
1 THERMOMETER	K 500	K 1500	SINDA CHEMICAL SUPPLIERS LUSAKA
pH-INDICATORS	K 500	K 1500	CC 4 4
PAPER Z-8			
METHYL ORANGE	K 50	K 50	CC 4 1

K 20750



# TOTAL EQUIPMENT & RAW MATERIAL COST

$$\text{EQUIPMENT COST} = \underline{\underline{K 20750.00}}$$

$$\text{RAW MATERIAL COST} = \underline{\underline{K 323640.00}}$$

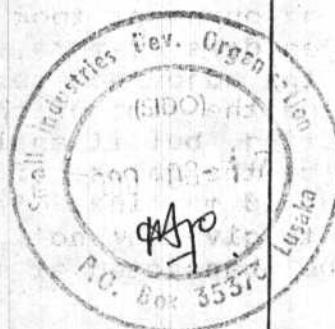
$$= \underline{\underline{K 344390.00}}$$

TOTAL COST

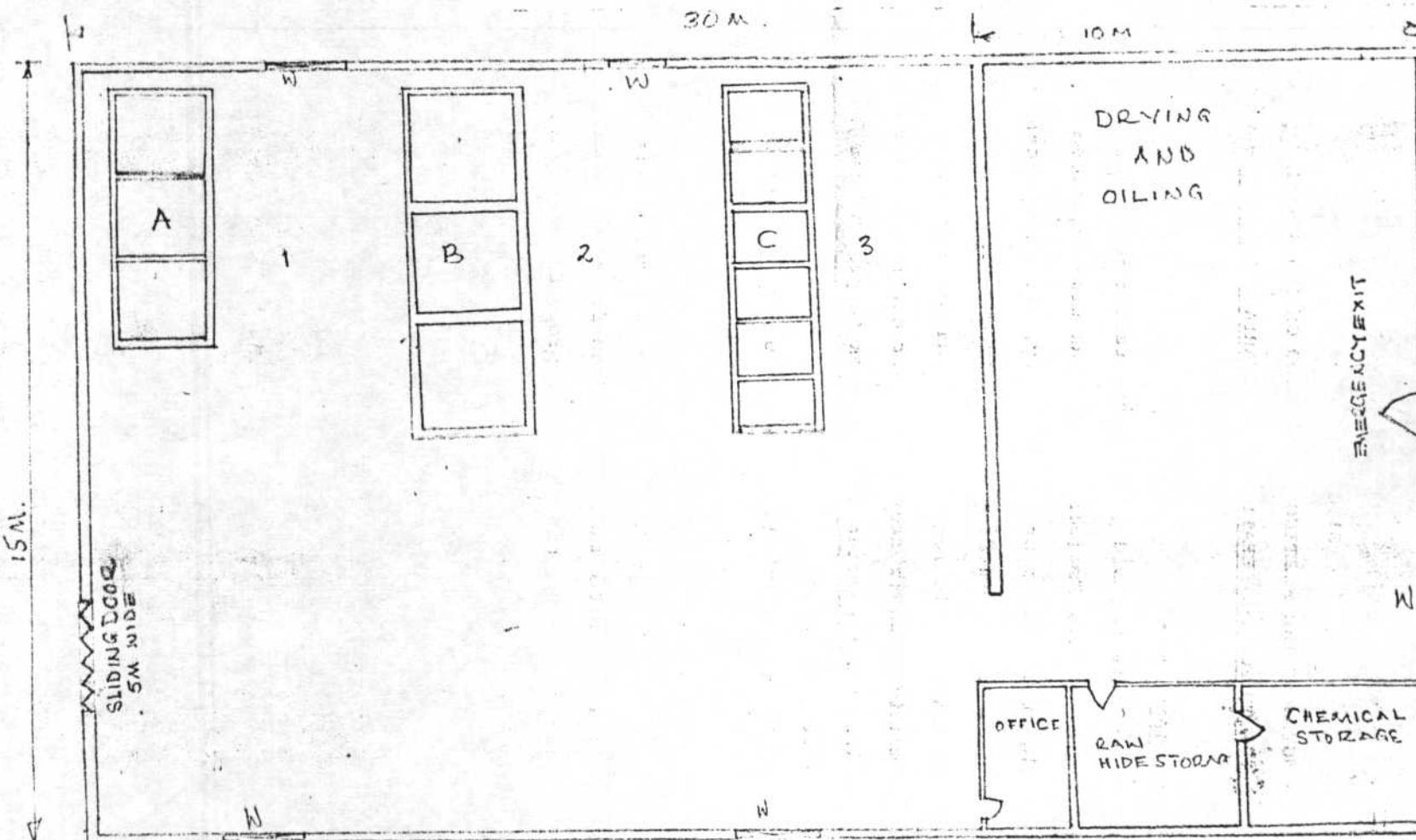


# RAW MATERIAL COSTS

RAW MATERIAL	UNIT COST PER DAY	PER DAY	PER MONTH	PER YEAR	SOURCE
CATTLE HIDE	K 150/HIDE	K 300	K 7500	K 90000	LOCAL AREA
GOAT/SHEEP SKIN	K 30/Skin	K 300	K 7500	K 90000	LOCAL AREA
LIME	K 200/25kg	K 28	K 700	K 8400	NDOLA LIM CHILANGA CEM
HYDROCHLORIC OR ACID	K 60/Kg	K 42.00	K 1050	K 12600	LOCAL HARD WARE
SULPHURIC ACID	K 60/Kg	K 42	K 1050	K 12600	NCZ SCCM KITW
AMMONIUM SULPHATE	K 120/50kg	K 100.8	K 2520	K 30240	NCZ CO-OPS
TEEPOL CH26	K 250/2.5L	K 140	K 3500	K 42000	SHELL (Z)
MIMOSA OR MYROBALAN	K 300/50kg	K 63	K 1575	K 18900	SIBO LUSAK
	K 300/50kg	K 63	K 1575	K 18900	SIBO LUSAK
		K 1078.80	K 26970	323640.00	







1, 2, 3 WORKING AND EXTENSION  
ROOM.

KEY  
A - LUMINAR PITS (2X2X1)M

A - LEAVING PITS (2x2x1.5)  
B = SOAKING, RINGING, LIMING/DELIMING PITS (2.5x2.5x1.5) M

C - PICKLING, TANNING PITS (1.5x1.5x1)m  
W - WINDOWS

