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INDUSTRIAL DEVELOPMENT AND CONSULTING BUREAU

TF/KUW/76/001

KUWAIT

(R)

Technical report: Feasibility study for setting up a  
factory for manufacturing cosmetics in Kuwait

Prepared for the Government of Kuwait  
by the United Nations Industrial Development Organization

20 JUN 1978

Based on the work of Adolph Fishman, expert in the  
manufacture of toothpaste, hair shampoo,  
creams, toilet powder and perfumes

United Nations Industrial Development Organization  
Vienna

id. 78-660

### Explanatory notes

References to dollars (\$) are to United States dollars, unless otherwise stated.

The monetary unit of Kuwait is the dinar (KD). During the period covered by the report, the value of the dinar in relation to the United States dollar was \$US 1 = KD 0.284.

Use of a hyphen between dates (e.g., 1973-1976) indicates the full period involved, including the beginning and end years.

A full stop (.) is used to indicate decimals.

A comma (,) is used to distinguish thousands and millions.

The term "billion" signifies a thousand million.

References to "tons" are to metric tons, unless otherwise specified.

Besides the common abbreviations, symbols and terms, the following have been used in this report:

c.f.	cost and freight
c.i.f.	cost, insurance, freight
IDCB	Industrial Development and Consulting Bureau
RSP	retail selling price

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ABSTRACT

At the request of the Ministry of Commerce and Industry of the State of Kuwait a feasibility study for the setting up of a factory for manufacture of perfumes, toothpaste, shampoos, creams and toilet powder was undertaken as a part of the project "Industrial Development and Consulting Bureau - Phase II" (TF/KUW/76/001). A team of experts was supplied by the Industrial Development and Consulting Bureau (IDCB) of the Ministry of Commerce and Industry and by the United Nations Industrial Development Organization (UNIDO).

It was found to be feasible and profitable to establish a factory in Kuwait to manufacture a wide line of toiletries and cosmetics and to initially import under a licensing agreement perfumes, lipsticks, face powder and eye make-up.

The products are heavily market-oriented. Product obsolescence is high. The skills of an advertising manager, sales manager and perfumer are essential to effect a 10% penetration of the \$150 million annual retail cosmetic market during the first two years of factory operation with break-even occurring in this interval. Export markets may comprise 15% of total sales and would be less profitable than domestic sales.

A combination of licensing of established perfume brands and eau-de-Colognes and the manufacture of other eau-de-Colognes, toilet water, shampoo, toothpaste, cold cream, vanishing cream, talcum powder, hair spray and deodorant products in liquid, paste, powder and aerosol form is recommended. Adequate advertising and marketing budgets and strategies, modern plant and fulfilment of present and future Government Regulatory Agency requirements are essential for success.

An investment of about \$3 million is needed.

It is suggested that the factory be located in Kuwait City next to the National Industries Detergent Plant, or in an area zoned for light industry.

Employment will be given to about 100 men and women, mainly professional and skilled, to plan to import, research, manufacture, package, distribute and market a product mix of over 300 items in 7 or 8 major categories.

Stress is placed on environmental and toxicological control and consumer protection, marketing and advertising practices. The need for close co-ordination between the Government of Kuwait and the planners of the factory is stressed and must be a preliminary step before going ahead.

The competition to be expected, the technology including formulations, raw materials, equipment, building utilities and labour requirements, market data and investment criteria and potential investment candidates are examined.

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## INTRODUCTION

As a part of the project "Industrial Development and Consulting Bureau - Phase II" (IF/KUW/76/001) the Ministry of Commerce and Industry requested a feasibility study for establishing a cosmetic factory in Kuwait. UNIDO and the Industrial Development and Consulting Bureau (IDCB) jointly set up a project group and enlisted the aid of an expert.

This report is based on interviews with about 200 Kuwaiti residents and government officials. The manufacturers of pharmaceuticals, detergents and aerosols in Kuwait were visited to view plants and obtain intelligence concerning product mix, prices, profitability, competition and market demand. Advertising agencies, importers, exporters, distributors and retail outlets such as pharmacies, supermarkets, food co-operatives, one-man groceries, department stores and the souks were visited to gain point-of-sale intelligence. This work was conducted by the expert and his IDCB counterpart. The project manager had overall responsibility for timing and efficient operation and the director of the IDCB enlisted the aid of all resources that might furnish data useful to the study. The technical adviser furnished data on the utility, plant, engineering and manpower aspects of the study. Two formal meetings and many informal ones were held to ascertain progress and to familiarize each other with such specialized knowledge as each possessed. (See annex I for the names of the project personnel.)

## I. FINDINGS

The population of Kuwait in 1975 was 995,000 of which 55% were male and 45% female. Households numbered 145,000 and there were about 7 persons per household; the annual rate of growth for the population was 6.1% (1970-1975). Approximately half of the population are Kuwaiti citizens; the remainder is mainly from the surrounding Arabic nations. Figures are from the Ministry of Planning, Central Statistical Office, Kuwait Review 1977.

The wealth of Kuwait derives from petroleum. The world's largest oil field is situated at Burgan near Ahmadi, Kuwait. Oil is found throughout Kuwait. The foreign trade export of Kuwait oil and refined products amounted to \$9 billion in 1975. Imports amounted to about \$2.5 billion.

The per capita income of the average resident of Kuwait was \$11,000 in 1975 and is estimated to be \$14,000 in 1977. There is no personal income tax and the Government contributes generously to residents' medical, educational and housing needs.<sup>1/</sup>

### The market

The market for cosmetics in Kuwait is estimated to be \$150 million per year at the retail level. Estimates were made from Import-Export Statistics for the year 1975 and the first 8 months of 1976 and then extrapolated to the start of 1978. The source for the figures was the Statistical Office of the Ministry of Commerce and Industry. Figure I shows the c.i.f. value of cosmetic imports from 1971-1977. An inset shows the per capita income for these years. The curves conform to the same general shape. The inset was used to guide the extrapolation but skewed toward a less rapid levelling off as it is felt per capita income for 1977 is underestimated.

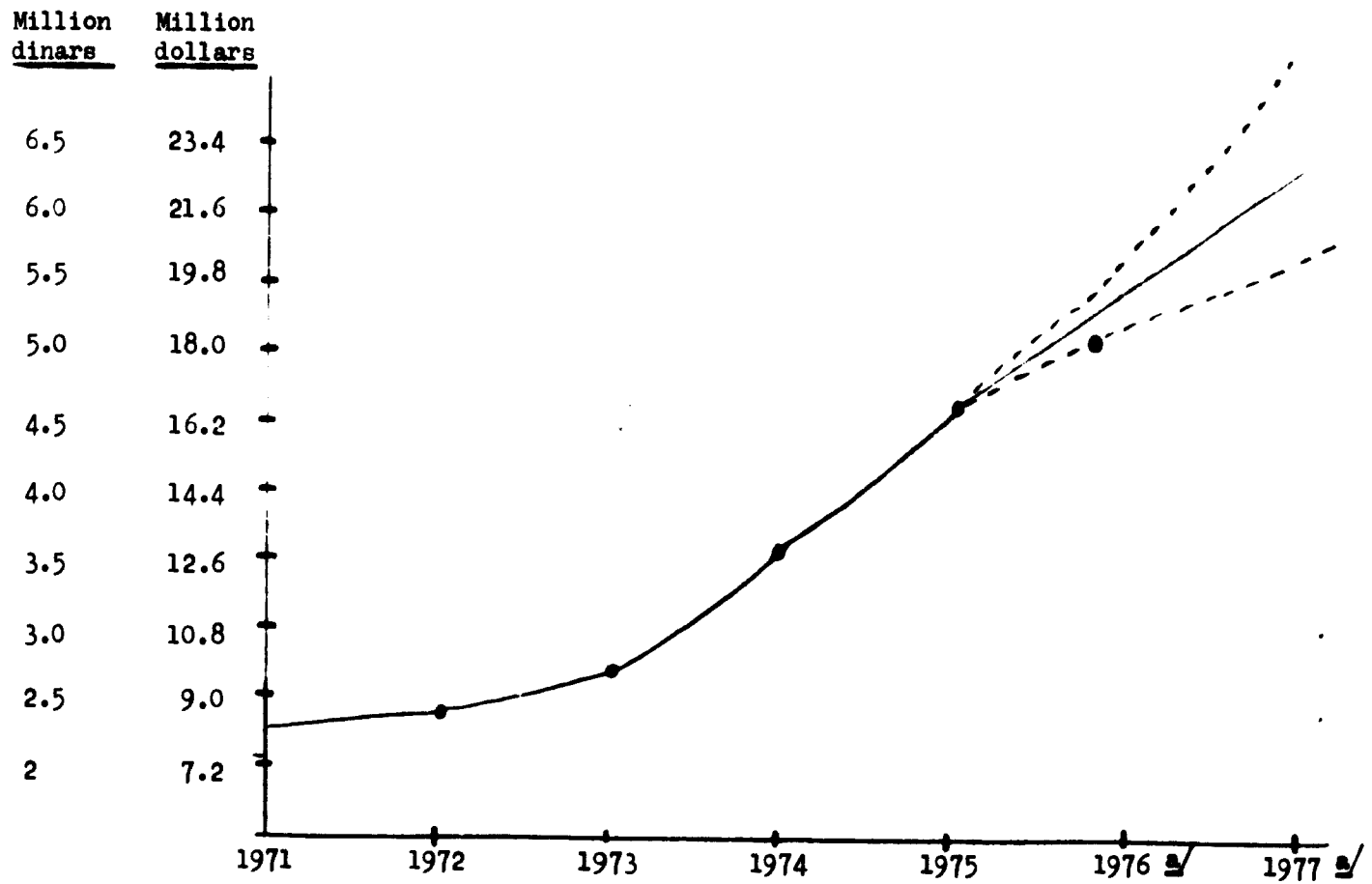
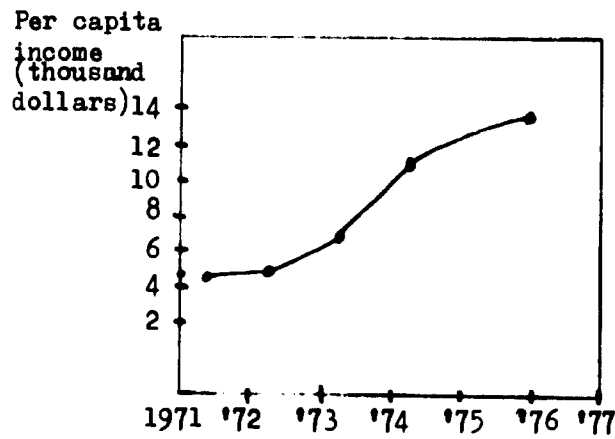
The c.i.f. value plus 4% ad valorem customs duty is the cost of merchandise to an importer bringing cosmetics into Kuwait. The total c.i.f. value of imports of cosmetics for 1977 is estimated to be \$23.4 million.

To obtain the retail value from the c.i.f. values a multiplier was used for various categories. Perfumes were multiplied by a factor of 9, cosmetics by a factor of 4. Then weighting the dollar ratio of perfume imports to other cosmetic imports a weighted multiplier of 6.4 was assigned to the combined perfume-cosmetic product mix. Thus a c.i.f. value of \$23.4 million when multiplied by the factor of 6.4 become \$150 million at the retail level.

<sup>1/</sup> Kuwait Review 1977.



Figure I. Imports of cosmetics in Kuwait, 1971-1977



<sup>a/</sup> Estimated c.i.f. value.

The factor for cosmetics was obtained by noting the retail selling price (RSP) of toothpaste per kilogram and dividing by the c.i.f. value per kilogram of toothpaste. Toothpaste was taken as representative of the cosmetic group as it is the least profitable product category within the cosmetic group to reduce investment risk (RSP to c.i.f.=4:1). For the perfumes, toilet water was taken as the least profitable category (RSP to c.i.f.=9:1).

The relation, in terms of money, of perfume sales to cosmetic sales is weighted in favour of perfume; thus a multiplier of 6.4 for the entire perfume-cosmetic product mix was concluded.

The \$150 million retail market so arrived at is in line with views expressed by personnel associated with the importing and retailing of cosmetics and perfumes of large pharmacies. It is in line with the figure of retail sales of soaps and detergents. There tends to be a correlation at the c.i.f. level. It also correlates with some fragmentary returns from a questionnaire issued to a middle income group working at the Ministry of Commerce and Industry.

It must be understood that the figure of \$150 million annually is the figure for retail sales and not for the sales made by the cosmetic factory under consideration. The manufacturer will sell to a distributor or retailer to place the cosmetics in the hands of the buying public. This combination of retailer or retailer plus distributor will bring the price to about  $\frac{2}{3}$  of the final selling price. An outlet for selling perfumes may buy at  $\frac{2}{3}$  of retail selling price whereas a supermarket may pay 85% of final selling price for toothpaste. It is estimated that the cosmetic manufacturer can sell his production at 70% of retail selling price. Thus the annual market available to a manufacturer is 70% of \$150 million or approximately \$100 million.

A 10% penetration of the Kuwaiti market is feasible in the first full year of production, and probable in the second year. The shares of the market held by any one firm is probably not that large at present. Perfumes are sold in Kuwait by hundreds of firms ranging in size from "bathtub" manufacturers to French companies with well-planned marketing strategies. There are also some local manufacturers who sell shampoo and perfumes under license.

Cosmetics, other than perfumes, except for a few toiletries are not manufactured to any large extent in Kuwait. Competition may be expected from well known firms such as Procter and Gamble, Revlon, Colgate, Lever Brothers, Gillette, Estée Lauder as well as many others. There is a tendency to specialize

and sell a treatment rather than a product. With this type of specialization come higher retail selling prices and a smaller market and difficulty proving claims to a government regulatory agency.

Product mix

Cosmetics as defined by the United States Federal Food, Drug and Cosmetic Act, as amended, means articles "(1) intended to be rubbed, poured, sprinkled or sprayed on, introduced into, or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness or altering the appearance, and (2) articles intended for use as a component of any such articles, except that such term shall not include soap".

The Statistics Department of the Ministry of Commerce and Industry reports export and import figures according to a recognized international classification system as follows.

551.001 aqueous distillates and solutions of essential oils. This classification includes such items as rose water and are of no interest at this time.

551.009 concentrated essential oils, enfleurage greases and synthetic perfumes. This classification includes the raw materials used by the perfumer. Essential oils are the plant derived odorants, enfleurage greases refer to pressing of flowers on lard to extract their perfume oils and then distilling the resulting grease with steam to liberate the free oil (essential). The lower layer may contain water soluble perfume in aqueous solution.

Classification 551.001 synthetic perfumes refer to such man-made imitations or new odorants made by organic chemical synthesis such as vanillin and iso-eugenol. Many of these raw materials alone or in combination will be imported as raw materials to be used in product formulation.

553.002 perfumery. A perfume may be considered as approximately a 20% solution of essential oils, synthetics, and fixatives in a specially denatured alcohol. Fixatives may be such expensive products as ambergris (from whales), musk (Himalayan goat) and oakmoss (lichen). A fixative retards the evaporation of the more volatile perfume ingredients to yield an odour of similar characteristics over an extended period of time.

Specially denatured alcohol is an alcohol approved by the Government for use in perfumery. It usually is 95% ethyl alcohol obtained from grain to which has been added a denaturant to render the alcohol unfit to drink but still useful to the perfumer. The Government concedes certain tax exemptions to the lawful user of this alcohol who must keep inventory records of amount purchased and withdrawn from a secure storage. This classification also includes eau-de-Cologne and toilet water. Today the terms are used almost interchangeably as 1 to 5% solutions of essential oils, synthetics and fixatives in a specially denatured alcohol-water mixture. Care must be taken that these eau-de-Colognes and toilet waters are not drunk as an illegal source of alcohol. Originally an eau-de-Cologne was a specific formulation type having a rose-orange blossom odour and made by Farina in Cologne.

553.000 toothpaste. This classification refers to a paste formed from mixing with water of various sweetening agents, detergents, mild abrasives, thickeners and perfumes, flavouring agents and dyes. It is packaged in a tube.

553.003 hair oils and brilliantines. This classification refers to the mixtures of light mineral oils, alcohol and perfumes and other minor ingredients to groom the hair.

553.004 shampoos. This classification refers to a 10% to 20% solution of surfactants in water. Such surfactants are usually sodium lauryl sulphate, other surfactants or coconut oil neutralized with caustic potash. Thickeners, conditioners, ingredients to decrease eye irritation, colourants, hair dyes and perfumes may be added.

553.007 incense, prepared. This refers to scent-impregnated sticks. The smoke of these sticks was originally used to cover the odour of sacrificial animals being burnt. (The word perfume is derived from per fume - for smoke). This product is of no great economic value to the cosmetic factory.

553.009 other cosmetics and toilet preparations. This is a catch-all category for creams, toilet powders, lipsticks, eye make-up, deodorants, hair sprays and lather shaving creams. Many products in this classification will be manufactured in the cosmetic factory.

Cream is an emulsion of water in oil or of oil in water of a paste-like consistency useful to coat the body with a thin layer of oil. It may contain some lanolin for its ability to soften and penetrate the skin, vitamins, hormones for supposed skin rejuvenation and other mildly medical ingredients. The oil

is a so called white oil obtained by cleaning up, i.e. deodorizing, the petroleum fraction containing light mineral oil and then bleaching with a clay treatment. A sulphuric acid treatment followed by an alkaline water treatment is used for deodorizing.

It may be useful to investigate the possibility to produce white oils in Kuwait. Also, it may be opportune to consider a production of vaseline, a mixture of heavy mineral oil and microcrystalline wax.

Lotion is similar to cream but is liquid. The proportion of mineral oil may be smaller in lotions than in creams.

Toilet powder or talcum powder is essentially Italian talc containing up to 1% perfume and magnesium carbonate to maintain a free-flowing condition. A mild disinfectant may be added if required. Toilet powder is used as a perspiration absorbent and skin lubricant.

Deodorants are essentially complex aluminium or zirconium salts which act as astringents to close up the sweat pores. Some controversy exists about their potential harmfulness.

Hair sprays are essentially a synthetic polymer dissolved in an alcohol-water mixture and packaged in aerosol form. They serve to fix the hair in place.

Lather shaving cream is essentially a paste consisting of a potassium coconut-oil or stearic-acid soap in water. It usually contains the glycerine content of the oil from which it was derived or it may be made with sodium lauryl sulphate.

Lather shaving spray may be a weak solution of lather shaving cream in aerosol form.

A production of 10% of perfumes including eau-de-Cologne and toilet water and 40% of cosmetics is envisaged. Initially, all perfumes will be licensed to obtain the advantage of a well-known brand name.

The production of cosmetics will be as follows:

	<u>Percentage</u>	<u>Value (\$)</u>
Hair spray	20	800,000
Creams and lotions	25	1,000,000
Deodorants	20	800,000
Toothpaste	10	400,000
Toilet powder	5	200,000
Aerosol shaving cream	10	400,000
Shampoos	<u>10</u>	<u>400,000</u>
	100	4,000,000

The c.i.f. value for a \$10,000,000 sales programme will be as follows:

The trade sale price ( $\frac{2}{3}$  of retail selling price) for licensed perfumes would be \$6,000,000 and their c.i.f. value \$1,000,000 ( $\frac{\$6,000,000 \times 3/2}{9}$ )

The c.i.f. value of cosmetics will be \$1,500,000 ( $\frac{\$4,000,000 \times 3/2}{4}$ )

### Investment

#### Raw materials, packaging and storage

Raw material cost of a chemical speciality is estimated to be  $\frac{1}{3}$  of c.i.f. value.

For perfumes the raw material cost will be the c.i.f. value, i.e. \$1,000,000 because it is bought as a finished product. (If it were manufactured in Kuwait it would be \$333,000).

For cosmetics the raw material cost including container is \$500,000 (1,500,000  $\div$  3).

Thus to produce \$10,000,000 of market-valued product, \$1,500,000 will be spent for raw materials and containers. For typical formulations see annex II.

The supply of raw materials must be examined. Such raw materials as detergents and emulsifiers may be imported. Because of time of delivery of 5 months by sea, an 8 month inventory must be maintained. Mineral oils will pose no problem. Aerosol propellants such as Freon are being phased out and replaced by butane. Consultation should be made with Sharhan, an aerosol filler who has made the switch from Freon to butane.

Storage tanks will be required for butane, mineral oil and for liquid soap or detergent used in bulk for shampoos.

Indoor storage must be provided for aerosol cans, valves, glass bottles, jars, tubes, cartons, stoppers, caps and containers. Drums may be stored outdoors underneath a steel canopy. The entire production operation is to be housed in a one-storey building of modern design provided with air-conditioning and heating facilities.

#### Water

The amount of water required for production is estimated to be 60% of weight of cosmetic or 233,000 kg (approximately 250 gallons of water a day). The water must be distilled water.

The weight of cosmetics corresponding to a c.i.f. value of \$1,500,000 is estimated at 338,000 kg. This figure was derived from 1975 statistics of imports by value and weight of the Ministry of Commerce and Industry.

City water could be used for wash-out purposes and cooling. Because of the large amount of dissolved solids in Kuwait city water each wash-out should be followed by a distilled-water rinse. A still capable of supplying 500 gal/day of distilled water is required.

The city water contains rust and must be filtered before use. It is estimated that 2,000 gal/day of city water will be required.

The cost of city water is KD 8 per 1,000 gal. The yearly cost will be KD 4,000 or \$14,400.

Estimating the use of 500 gals per day of distilled water produced at KD 1 per 1,000 gal, the annual cost of distilled water will be KD 125 or \$450. The total water cost will be about \$14,850 per year.

#### Building and site

Initially the area of the building will be 3,300 m<sup>2</sup>. It will be air-conditioned and heated electrically. It is to be of modern design of modular construction and capable of being expanded to 10,000 m<sup>2</sup> in 5 years.

A preliminary cost estimate from Butler International Company of Kansas City, Missouri, indicates materials delivered Kuwait c.f. would be \$45/m<sup>2</sup>; \$180/m<sup>2</sup> for erection cost that is for the initial 3,300 m<sup>2</sup> a cost of about \$750,000. Air conditioning (a/c) would cost \$30/m<sup>2</sup>, that is \$99,000 for the building. Thus, the total price of the air-conditioned building would be about \$849,000.

The chosen site is near the National Detergent Industry. It will be possible to use an alcohol sulphation technique at the detergent plant on synthetic C<sub>12</sub> and C<sub>14</sub> alcohols to yield sodium lauryl sulphate.

The site will occupy 36,000 m<sup>2</sup>. The yearly governmental rental rate is KD 75 per 1,000 m<sup>2</sup>. The site rental per year will be KD 2,700 or \$9,720. A 2-m high fence around the property would cost \$54 per running metre, that is \$42,120 for a 780-m fence. About 500 ft of inside road will cost approximately \$23,400. Thus, the total site cost will be \$75,240.

Manpower and organization

Employment will be given to about 50 people working in the factory and 50 salesmen calling on the customers. Figure II shows the organization chart.

		<u>Monthly salary (\$)</u>
Professional staff		
1	General manager	5,000
1	Advertising manager	4,000
1	Sales manager	4,000
1	Administrator	2,500
1	Mechanical engineer in charge of production and maintenance	2,000
1	Perfumer	4,000
1	Chief chemist	2,500
1	Microbiologist	2,000
1	Quality control chemist	1,500
1	Research and development chemist	2,000
1	Programmer	1,800
1	Purchasing agent	1,800
1	Office manager	1,500
1	Controller	2,000
1	Lawyer (contracts, licensing)	<u>2,000</u>
		38,600
Skilled labour		
1	Typist (translator, Arabic and English)	650
1	Typist (steno) Arabic	600
1	Data processor	500
1	Clerk (sales or purchasing or bookkeeping)	500
1	Accounting clerk	900
1	Bookkeeper	900
1	Maintenance foreman	1,000
1	Lathe operator	700
1	Filling line mechanic	800
1	Shipping and receiving clerk	<u>900</u>
		7,450



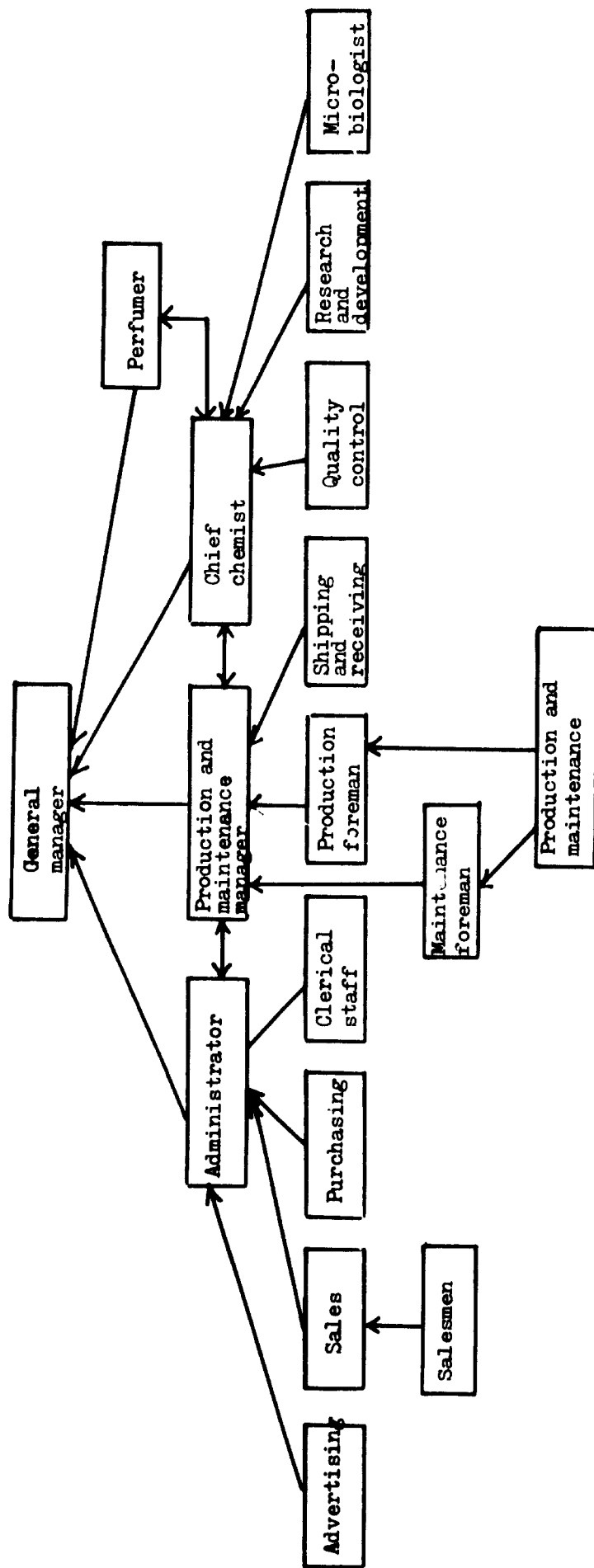


Figure II. Organization chart

25	Clerical and production at \$500	12,500
50	Salesmen at \$2,000	<u>100,000</u>
	Total	112,500
	10% for benefits	<u>15,855</u>
	Total monthly	<u>174,405</u>
	Total annual	2,092,860

Major equipment (including spares)

	Production	<u>Dollars</u>
Aerosol filling production line (capacity 35 cans per minute)		70,000
Liquid filler (capacity 5,000,000 units per year or 100 a minute)		60,000
Powder filler		40,000
Toothpaste production and filling machine (can also be used for cream)		60,000
Tank farm (4x1,000 gal-tanks)		40,000
Production filter		5,000
Refrigerator for cooling shampoo to 5°C		5,000
Tanks, pumps, motors (stainless steel)		15,000
Water distillation unit		3,000
Laboratories and library		
Laboratory for the perfumer		10,000
Research and development laboratory		20,000
Microbiological laboratory		10,000
Control laboratory		10,000
Library with standard reference works and magazine subscriptions		20,000
Automotive		
2 small $\frac{1}{2}$ -ton trucks and 2 fork-lift trucks		30,000
Tools and maintenance		
Lathe, drills and hand tools; tool crib; spare parts; plumbing, woodworking and steamfitting equipment		50,000

Office equipment and furniture

Office furniture	10,000
Photocopying machine	5,000
Typewriters, dictating machines	5,000
Reception room	20,000
General manager's office	10,000
A computer suitable to process data for sales, payroll, inventory, formulation and production printout	200,000

The amount of design work to be carried out is included in the cost of the building. Butler Mfg. Co. of Kansas City, Missouri, USA, who has built similar structures estimates a cost for materials of suitable construction for the design delivered in Kuwait at \$45/m<sup>2</sup> not including insurance.

The cost for erection of the building according to figures furnished by the Industrial Development and Consulting Bureau of the Ministry of Commerce and Industry of Kuwait is \$180/m<sup>2</sup>. Some contingency must be made for architect's fee during construction but it is included in erection and Butler design costs.

Insurance content of the c.i.f. may amount to 1% of \$150,000 (\$1,500) as Butler quotes c.f.

Licensing fees are estimated at 5% of the selling price of the perfume component of \$6,000,000, that is \$300,000. This does not include know-how but includes the non-exclusive right to distribute and use well-known brand names. Know-how for equipment purchase, production and distribution will be furnished by the management and cadre group. Provision is made for an external consultant at \$50,000 per year.

Working capital includes a large inventory of cosmetic raw materials, i.e. 8 months of supplies for the cosmetic component and a 10-days supply of the perfume component. The cost of the total inventory is \$360,000 (\$333,000 for the cosmetic component and \$27,000 for the perfume component).

Accounts receivable are estimated at \$430,000 (cost of sales less depreciation and interest divided by 12). The cost of sales is \$6,216,500 depreciation is \$115,300 and trade terms are 30 days net.

Spare parts are included in original equipment cost..

Work in progress is estimated at 10 days production, that is, about \$167,000.

Finished goods inventory is production cost minus depreciation divided by 12 (administrative overhead is included in production cost). Finished goods will be a 30 day supply of production, that is, \$498,000 (5,976,100 divided by 12).

Cash-in-hand for a contingency reserve is maintained at about 5% of working capital, that is \$60,000.

Calculation of investment requirements

	<u>Dollars</u>
<u>1. Working capital</u>	
Accounts receivable (30 days)	430,000
Inventory (raw materials, including packaging)	360,000
Spare parts contingency	20,000
Work-in progress (10 days)	167,000
Finished goods inventory (30 days)	498,000
Cash-in-hand (5% of working capital)	60,000
Accounts payable (30 days for raw materials and utilities)	<u>-143,000</u>
	1,392,000
<u>2. Fixed costs</u>	
Building	849,000
Site	75,240
Equipment	298,000
Laboratories and library	70,000
Automotive	30,000
Tools and maintenance	50,000
Office equipment and furniture	50,000
Computer purchase	<u>200,000</u>
	1,622,240
<u>3. Sales per year</u>	10,000,000
<u>4. Cost of sales</u>	
Raw materials and packaging	1,500,000
Labour	2,092,200
Advertising (20% of trade sales)	2,000,000
Air conditioning (a/c) cost of operation	99,000
Utilities (estimated, not including a/c)	100,000
Licensing fees (5% of \$6,000,000)	300,000

	<u>Dollars</u>
Depreciation	
Building (5%)	42,500
Equipment (10%)	22,800
Automotive (33%)	10,000
Office (20%)	10,000
Computer (15%)	30,000
Land rental	<u>10,000</u>
	6,216,500
<u>5. Administrative costs</u>	
Labour (80% of total)	1,673,760
Advertising (100% of total)	2,000,000
Utilities (10% of total)	10,000
Air conditioning (10% of total)	<u>9,900</u>
	3,693,660
<u>6. Production cost of sales</u>	
Production cost of sales is cost of sales minus administrative cost minus depreciation, that is	2,407,540
<u>Total investment</u>	
Pre-production capital cost	931,500
Fixed costs	1,622,240
Working capital	<u>1,392,000</u>
	3,945,740
<u>Pre-production capital cost</u>	
2 x annual salary of 4 key personnel	400,000
Licensing fees	300,000
Consulting fees	50,000
Design work (estimate)	30,000
Insurance	1,500
Shake-down	100,000
Contingency	<u>50,000</u>
	931,500

Break even calculation

fixed costs

yearly sales less yearly variable cost of sales  
= fraction of a year at which break-even occurs

$$\frac{1,622,240}{10,000,000 - 6,216,500} = 0.42$$

Thus break-even occurs at 42% of capacity or when the following product mix in the value of \$4,200,000 has been sold:

	<u>Dollars</u>
Perfume	2,520,000
Hair spray	336,000
Creams and lotions	420,000
Deodorants	336,000
Toothpaste	168,000
Toilet powder	84,000
Aerosol shaving cream	168,000
Shampoo	<u>168,000</u>
	2,200,000

A rough estimate of the aggregate number of physical units represented by this volume of perfume and cosmetics sales is 1.5 million to 2 million packages.

Owing to the high profitability of the cosmetic factory it should not be difficult to obtain investment candidates. What is desired is an investor who will have an interest in the long-time success of the enterprise and the interests of the people of Kuwait at heart.

Many entrepreneurs that have been met would make good candidates. The form of entrepreneurship should be a limited liability company with a public offering of shares. A 50-50 ratio is suggested between investor and public holdings.

There is no need for government participation as government regulatory agencies will greatly influence the course of the enterprise.

The interrelation between the chemical specialities,  
soap and cosmetic industries

A chemical speciality is a product which is oriented toward a specific use, e.g. floor wax, oven cleaner.

By soap is meant soaps and detergents. Generally they clean; they may also permit oil to mix with water or create foam or kill foam. They are also useful in oil field operations or in mineral recovery. A knowledge of the uses of soap and detergents is the key to success in the chemical speciality and cosmetic industries.

Cosmetics are beauty aids.

The trio is the largest value producing group in the chemical industry. All three are market-oriented and not raw material sensitive. Most formulations are physical mixtures rather than chemical reactants.

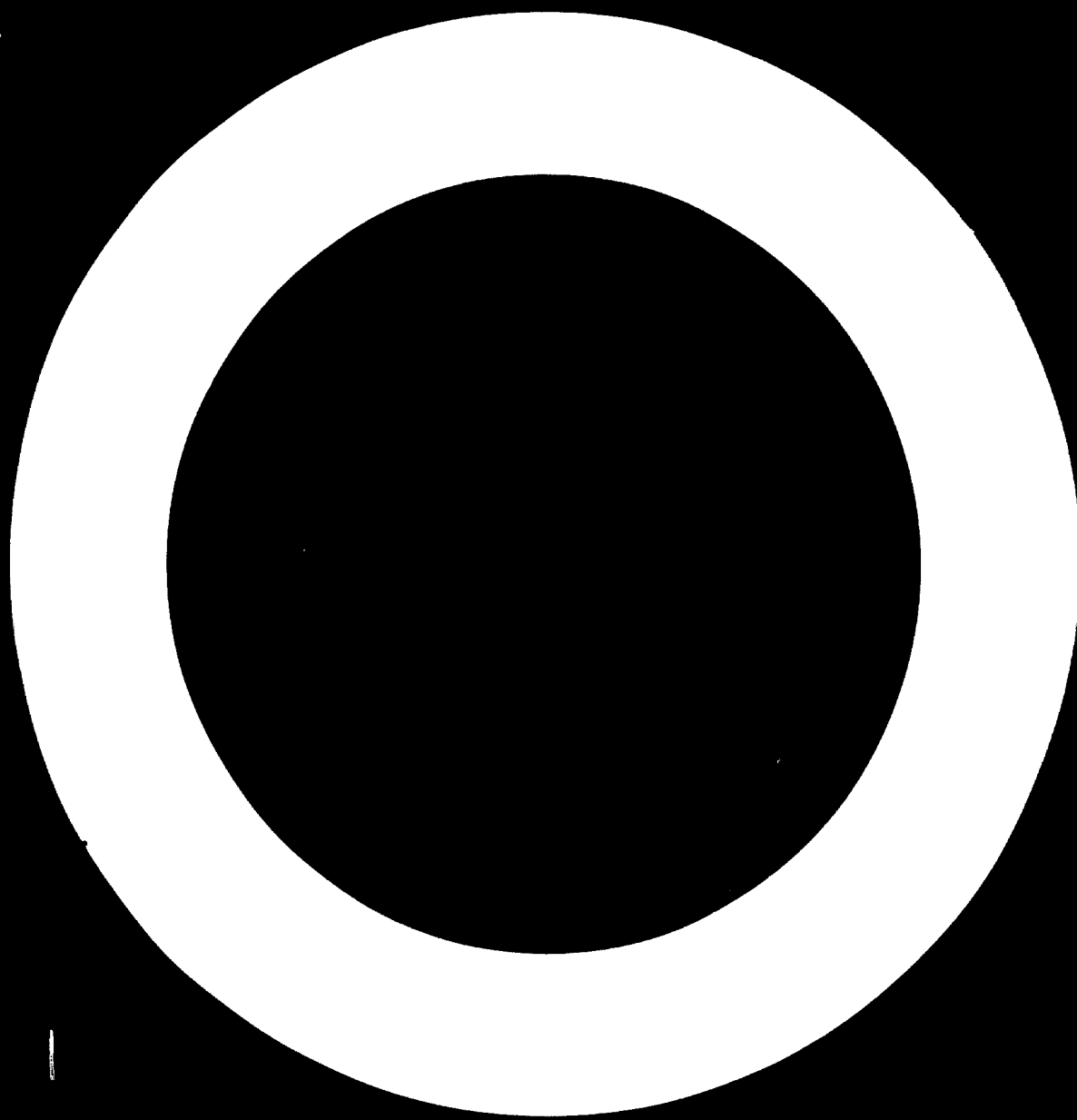
Remarks and observations

1. Kuwait is a tax-free zone. However, there is a 4% ad valorem customs duty imposed on the c.i.f. value of entering goods.
2. There are no personal income taxes. Foreigners who may be partners in an enterprise pay a tax.
3. The matter of trade marks, copyrights, patents and licensing agreements should be dealt with by an attorney who may also be secretary of the limited liability company formed for the cosmetic venture.
4. Regulatory agency co-ordination is a full time task and should be dealt with by someone with prior experience in the United Kingdom or United States of America.
5. Prior to buying any know-how for packaging, formulations, equipment selection, processes, regulatory agency and animal test work, a consultant should be contacted.
6. There are active stock exchange and brokerage houses in Kuwait trading shares.
7. There are many scientific institutes in Kuwait that can be of use to the cosmetic venture.
8. The problem of obtaining a supply of quality water is not underestimated.
9. The profitability of the enterprise is very sensitive to the ratio of retail selling price to c.i.f. value. This ratio should be checked periodically.
10. The skills of good management more than any other single ingredient are required to create a successful enterprise.
11. Quality control, good maintenance and the application of creative and innovative approaches are also required.
12. Within the first year of letting contracts the factory may start production and be in full production within 2 years.
13. The enterprise fits well into the social and economic pattern of Kuwait, i.e. emphasis away from petroleum as a prime earner, bringing women into the work force, reducing hard currency outflow, relatively non-polluting and geared to the market-size of Kuwait.
14. The export market may be more illusory than real. Kuwait's potential trading partners may diminish purchases within 5 years.

## II. RECOMMENDATIONS

1. Create and co-ordinate a government regulatory agency structure to regulate the cosmetic industry.
2. Build a cosmetic factory; license perfume, lipstick, eye make-up; produce toothpaste, shampoo, creams, toilet powder, hair spray and deodorants.
3. A preliminary meeting should appraise the Al Sharhans, Al Bahans, National Detergent Industry and National Pharmaceutical Industry and interested importers of the intended cosmetic enterprise.
4. If a cosmetic factory is approved, hire the key personnel, i.e., general manager, advertising man, perfumer, sales manager and chief chemist, to start the pre-production planning and research.





Annex I

PROJECT PERSONNEL

M.I. Khalil, Project manager, UNIDO

Falah Al-Asoussi, Chemical engineer, Expert counterpart, IDCB

A.M. El Behery, Ph.D., Mechanical engineer, Technical adviser, UNIDO

Adolph Fishman, Consulting chemist, Expert on mission, UNIDO

Najeeb I. Al Foriah, Director, IDCB

Annex II

TYPICAL FORMULATIONS

	<u>% by weight</u>
<u>Cold cream</u>	
Mineral oil, light	50.0
Beeswax	17.0
Borax	1.0
Water	<u>32.0</u>
	100.0
 <u>Perfume</u>	
Perfume essence (10-50 ingredients)	20.0
Specially denatured alcohol	<u>80.0</u>
	100.0
 <u>Shampoo</u>	
Potassium coconut-oil soap	25.0
Potassium olive-oil soap	5.0
Alcohol	15.0
Glycerol	5.0
Water	<u>50.0</u>
	100.0
 <u>Shaving cream (lather type)</u>	
Sodium and potassium stearine (tallow) soap	30.0
Sodium and potassium coconut-oil soap	15.0
Glycerol	10.0
Water	<u>45.0</u>
Perfume (to suit)	100.0
 <u>Toilet powder</u>	
Talc	94.0
Magnesium carbonate	5.0
Perfume	<u>1.0</u>
	100.0

	<u>% by weight</u>
<u>Toilet water and cologne</u>	
Perfume essence	3.0
Alcohol and water	<u>97.0</u>
	100.0
<u>Toothpaste</u>	
Dicalcium phosphate	40.0
Sodium lauryl sulphate	1.5
Glycerol	20.0
Gum tragacanth	1.5
Saccharin	0.1
Flavour oils	0.9
Water	<u>36.0</u>
	100.0
<u>Vanishing cream</u>	
Stearic acid	15.0
Sorbitan monostearate	2.0
Polyoxyethylene sorbitan monostearate	1.5
<u>d</u> -Sorbitol (70%)	7.5
Water	<u>74.0</u>
	100.0

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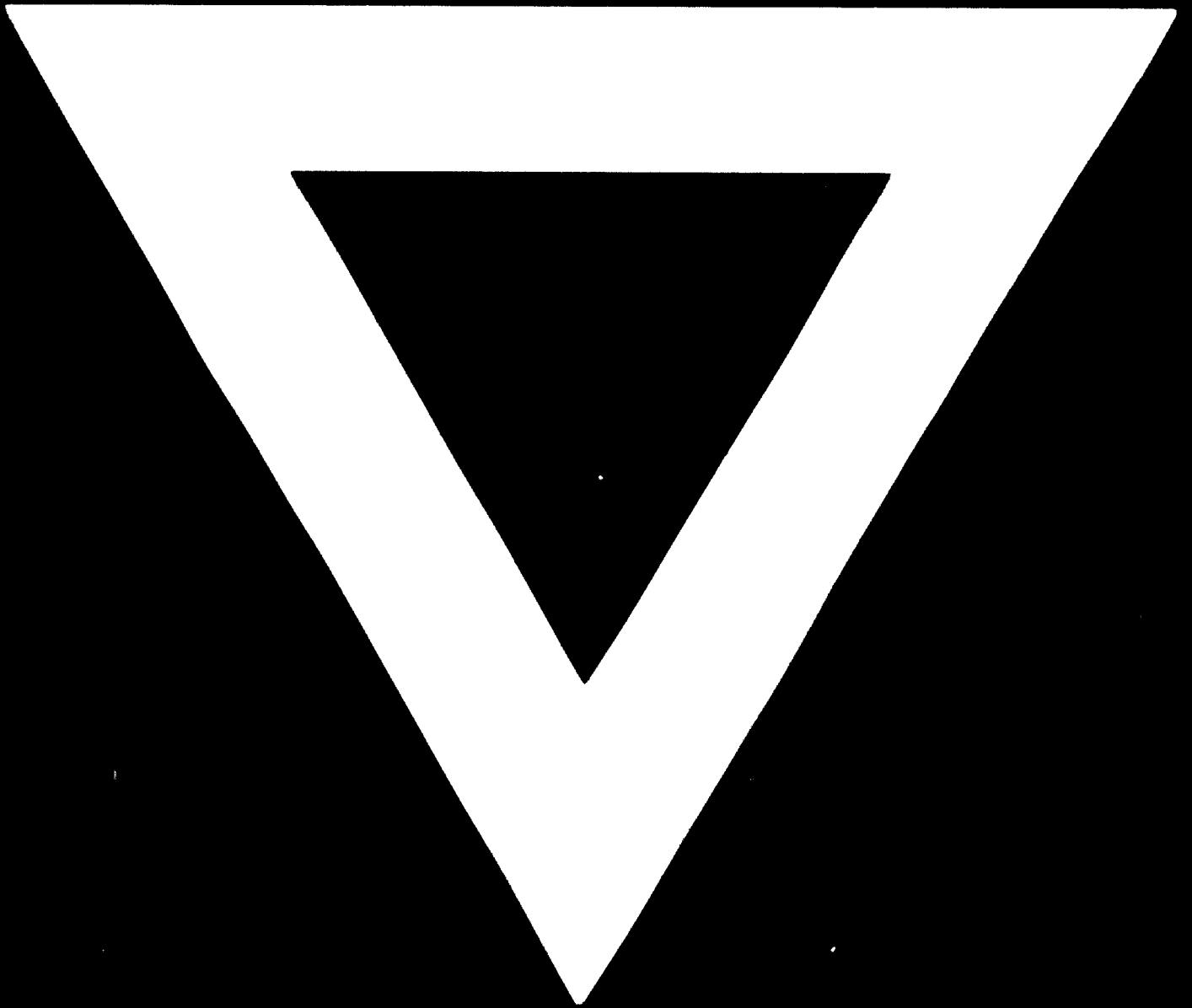
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