

**REPORT ON  
QUANTIFICATION OF DRUG  
CONSUMPTION IN NEPAL**

**Submitted to  
Department of Drug Administration (DDA)  
Bijulibazar, Kathmandu**



**Submitted by  
Pharmaceutical Horizon of Nepal (PHON)  
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# **Study Team**

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## **1. BACKGROUND**

In 1979, the importation of drugs was estimated to be worth Rs.114.6 millions. Another study conducted in 1988 showed drug worth Rs.385 million was imported. The study in 1992 showed the total consumption of drugs to be Rs.1532 million in sales value. The last study conducted by PHON for DDA found modern drugs of Rs.5907 million was consumed in the year 1999/2000. Though the pharmaceutical industries started in seventies, increase of industries began in the eighties. At present, there are 40 pharmaceutical industries in operation in Nepal, 4 of which also produce veterinary medicines also.

Quantification of drugs is normally appropriate for forecasting large scale procurement, estimating budget requirements, forecasting new programs, forecasting for assistance projects, estimating drug requirements in emergency relief situation.

Drugs are one of the important components in the delivery of health care. For effective drug management a proper selection, quantification, procurement, distribution and use are important.

## **2. OBJECTIVES**

The general objective of the study was to estimate the consumption of modern, veterinary, ayurvedic/unani and homeopathic medicines. The specific objectives of this study were to:

- estimate the value of imported medicines and vaccines
- estimate the value of local production of medicines
- estimate the value of medicines procured by MOHP through import
- estimate the value of medicines procured by INGOs and NGOs through import.
- estimate the retail sale value of imported and local productions
- identify and quantify top fifteen selling modern medicines produced by domestic industries.
- estimate the percentage of essential medicines produced by the domestic industries.

### 3. SIGNIFICANCE OF THE STUDY

Estimating the current national consumption of drugs has generated data, which can serve a basis for planning an effective drug management as well as making self-reliant drug production through the national industries.

### 4. METHODOLOGY

The study covered fiscal year 2061/62 (2004/2005) and data were collected from following sources:

#### 4.1. Data Source

- Private importers
- UN Agencies / International Agencies/ NGOs/ INGOs
- Domestic manufacturing and repacking industries.
- Department of Customs
- Logistics Management Division (LMD), Department of Health Services.
- National Tuberculosis Center (NTC)
- National STI and HIV/AIDS Center.
- Public and private medical colleges importing drugs.

The data from the public and private medical colleges, UN agencies/ International agencies/ NGOs / INGOs, were collected if DDA had given authorization to import. The central level hospitals did not import any medicine.

#### 4.2. Sampling

The tables I to III show sampled custom points, all domestic drug manufacturers including repackaging industries, and all importers for collecting data but the data were not available from the custom points. However, the total import from various custom offices was collected from the Department of Customs.

**Table I: Sampled Custom Points**

- |                      |                  |
|----------------------|------------------|
| 1. Kakarvita         | 6. Bhairahawa    |
| 2. Biratnagar        | 7. Nepalgunj     |
| 3. Kathmandu Airport | 8. Dhangadi      |
| 4. Birgunj           | 9. Mahendranagar |
| 5. Tatopani          |                  |

**Table II A: Domestic Allopathic/ Veterinary Drug Manufacturers and Repackaging Industries**

1. Alive Pharmaceuticals Pvt. Ltd	Kathmandu
2. Alliance Pharmaceuticals Pvt. Ltd	Birganj
3. Amie Pharmaceutical Laboratories Pvt. Ltd	Janakpur
4. Amtech Pharmaceuticals Pvt. Ltd	Biratnagar
5. Apex Pharmaceuticals Pvt. Ltd	Birgunj
6. Arya Pharmalab Pvt. Ltd	Birgunj
7. Asian Pharmaceuticals Pvt. Ltd	Rupandehi
8. Birat Pharmalab Pvt. Ltd	Biratnagar
9. Chemidrug Industries	Kathmandu
10. Concept Pharmaceuticals (Nepal) Pvt. Ltd	Birgunj
11. CTL Pharmaceuticals Pvt. Ltd	Bhaktapur
12. Curex Pharmaceuticals Pvt. Ltd	Kavre
13. Danium Laboratories Pvt. Ltd	Birgunj
14. Deurali-Janta Pharmaceuticals Pvt. Ltd	Kathmandu
15. Dingla Pharmaceuticals Pvt. Ltd	Biratnagar
16. Everest Pharmaceuticals Pvt. Ltd	Bhaktapur
17. Elder Universal Pharmaceuticals Pvt. Ltd	Rupandehi
18. Florid Laboratories Pvt. Ltd.	Lalitpur
19. G. D. Pharmaceuticals Pvt. Ltd	Birgunj
20. Hukam Pharmaceuticals Pvt. Ltd.	Bhaktapur
21. Lomus Pharmaceuticals Pvt. Ltd	Kathmandu
22. Manoj Pharmaceuticals Pvt. Ltd	Dharan
23. Manoj Chemical Works	Dharan
24. Mark Formulations Pvt. Ltd	Kathmandu
25. Medivet Pharmaceuticals Lab. Pvt. Ltd	Bhaktapur
26. Milan Pharmaceuticals Pvt. Ltd	Biratnagar
27. National Healthcare Pvt. Ltd.	Birgunj
28. Nepal Aushadhi Limited	Kathmandu

29. Nepal Chemical Works	Biratnagar
30. Nepal Pharmaceuticals Lab Pvt. Ltd	Birgunj
31. Omnica Laboratories Pvt. Ltd.	Bhaktapur
32. Pharmaceutical Company of Nepal Pvt. Ltd	Birgunj
33. Pharmaco Industries Pvt. Ltd	Kathmandu
34. Quest Pharmaceuticals Pvt. Ltd	Birgunj
35. Raj Chemical Works (Repacking) Pvt. Ltd	Jhapa
36. Serene Pharmaceuticals Pvt. Ltd.	Kathmandu
37. S. R. Drugs Laboratories Pvt. Ltd.	Kathmandu
38. Shiv Pharmaceuticals Lab Pvt. Ltd	Dharan
39. Shree Ram Pharmaceuticals (Repacking)	Birgunj
40. Siddhartha Pharmaceuticals Pvt. Ltd	rupandehi
41. Simca Laboratories Pvt. Ltd	Bhaktapur
42. Sumy Pharmaceuticals Pvt. Ltd.	Navalparasi
43. Time Pharmaceuticals Pvt. Ltd	Nawalparasi
44. Unique Pharmaceuticals Pvt. Ltd	Birgunj
45. Vijayadeep Pharmaceuticals Pvt. Ltd	Lalitpur
46. Vijaydeep Laboratories Pvt. Ltd.	Lalitpur

**Table II B: Domestic Ayurvedic/ Unani Manufacturers**

1. Aarogya Bhawan Works	Kathmandu
2. Ampaco Laboratories Pvt. Ltd.	Janakpur
3. Anmol Jadibuti Udyog	Lalitpur
4. Chakra Home Ayurvedic	Lalitpur
5. Chandra Ayurved Bhawan	Birgunj
6. Chirayu Ayurved	Dhading
7. Dabur Nepal	Birgunj
8. Dekho Herbals	Dhapakhel, Lalitpur
9. Gorkha Ayurved Udyog	Gorkha
10. Herbs Production and Processing Co. Ltd.	Kathmandu
11. Himal Herbal Product	Kathmandu
12. Himalayan Herbal Preparation	Kathmandu
13. Himalayan Special Herbals Industries	Gothathar, Kathmandu

14. Jyoti Veda Pharma	Birgunj
15. Kunfen Aausadhi Udyog	Kathmandu
16. Lumbini Ayurvedic Pharmacy	Butwal
17. N. N. Herbals Industries Pvt. Ltd.	Thankot, Kathmandu
18. Nepal Herbal Industries	Birgunj
19. Nikhil Ayurved Pvt. Ltd.	Butwal
20. Niko Ayurved Pvt. Ltd.	Kathmandu
21. Pandit Ayurved Udyog	Butwal
22. Pasupati Ayurved Ausadhalaya	Rautahut
23. Pasupati Vet Product (Ayurved)	Nayabazar, Kathmandu
24. Pokhareli Ayurvedic Udyog	Pokhara
25. Sagarmatha Ayurvedic Aushadhi Udyog	Nayapati, Lalitpur
26. Shree Gyawali Ayurvedic Udyog	Sarankot, Kaski
27. Shree Krishna Aushadhalaya	Kathmandu
28. Shree Sita Ayurved Center	Birgunj
29. Siddha Ayurvedic Pharmacy Pvt. Ltd.	Rupendehi
30. Siddhartha Jadibuti Udyog	Satungal, Kathmandu
31. Singhdurbar Vaidhyakhana	Kathmandu
32. Suri Herbal Products	Thimi, Bhaktapur

**Table III: List of Allopathic, Ayurvedic/Unani, Veterinary and Homeopathic Importers**

**A. Allopathic Importers**

1	Alliance Enterprises	Kathmandu
2	Alpine Pharmaceuticals Dist. Pvt. Ltd.	Kathmandu
3	Amravati International Pvt. Ltd.	Kathmandu
4	Arniko International Pvt. Ltd. (Pharma Div.)*	Kathmandu
5	Atlas Medicine Concern	Kathmandu
6	B.R. Medical Suppliers Pvt. Ltd.	Kathmandu
7	Balajee Medicine Distributors	Birgunj
8	Banerjee & Brothers	Birgunj
9	Bashundhara Drug Distributors	Kathmandu
10	Bhajuratna Pharma Pvt. Ltd.	Birgunj
11	C. E. Pharma Pvt. Ltd.	Kathmandu
12	Chao Sati Pharma	Birgunj
13	Collection Pharma	Kathmandu
14	D. K. Medisales	Kathmandu
15	Ethimed Concern Private Limited	Kathmandu
16	Excel Trading Concern	Birgunj

17	Farmanura Pvt. Ltd.	Kathmandu
18	Formed Pvt. Ltd.	kathmandu
19	G. Pharmalink Pvt. Ltd.	Birgunj
20	Gracure Medicose*	Kathmandu
21	Gunjeshwari Pharma	Birgunj
22	Gupta & Sons Medical Hall	Birgunj
23	Impex Speedways (Pharma Division)*	Kathmandu
24	Instyle Trading Concern	Kathmandu
25	Jay Medico Distributors	Nepalgunj
26	Kalptaru Traders	Kathmandu
27	Keyal Trading Concern	Birgunj
28	Liana Trade Concern Pvt. Ltd	Birgunj
29	Link-Med Pvt. Ltd.	Kathmandu
30	Luna Trading Co. P. Ltd.	Birgunj
31	Maheshwari Distributors Pvt. Ltd.	Kathmandu
32	Malla Pharmaceuticals*	Kathmandu
33	Mecord Nepal Pvt. Ltd*	Kathmandu
34	Medi Impex	Kathmandu
35	Medi Sales Pvt. Ltd.	Kathmandu
36	Medi Surg Impex	Kathmandu
37	Mediaids (Nuraz) Pvt. Ltd.	Kathmandu
38	Medicine Distributor Centre	Kathmandu
39	Medinura Pvt. Ltd.	Kathmandu
40	Meditron International	Kathmandu
41	Minko Pharma Link	Kathmandu
42	Moon Pharmaceuticals Pvt. Ltd.*	Kathmandu
43	National Medicine Concern	Kathmandu
44	Nava Durga Medicine Pharma*	Kathmandu
45	Nepal Drug Distributors	Kathmandu
46	New Narayani Drug House	Birgunj
47	Nicco Pharma International	Birgunj
48	Niraj Pharmaceuticals Pvt. Ltd.	Birgunj
49	Nishant Pharmaceuticals Pvt. Ltd.	Birgunj
50	Paschimanchal Medi Distributors*	Nepalgunj
51	Pharma House	Kathmandu
52	Pharma Trade International Pvt. Ltd	Kathmandu
53	Pharmachem Pvt. Ltd.	Birgunj
54	Pharmamed Intrnational	Kathmandu
55	Prabin Medical Hall	Kathmandu

56	Prime Med International Pvt. Ltd.	Kathmandu
57	Priya Trading Pvt. Ltd.	Kathmandu
58	R.S Pharma Link Pvt. Ltd	Birgunj
59	R.S. Medico Pvt. Ltd.*	Birgunj
60	Rainbow Trade Concern Pvt Ltd	Birgunj
61	Sajha Swastha Sewa	Kathmandu
62	Sanjivani Trading Pvt. Ltd. (Pharma Div.)	Kathmandu
63	Sankharapur Pharmaceuticals	Kathmandu
64	Shakti Medicare Suppliers Pvt. Ltd.	Kathmandu
65	Shivam Aushadi Pvt. Ltd	Birgunj
66	Shree Om Brothers Pvt. Ltd.	Kathmandu
67	Shreejana Pharamaceuticals Pvt. Ltd.	Kathmandu
68	Shubh Labh Pharma Link	Birgunj
69	Super Distributors Pvt. Ltd.	Birgunj
70	Swastik Distributors	Birgunj
71	Tridev Pharmaceuticals	Kathmandu
72	Trishul Pharma Traders*	Kathmandu
73	Unique Trade Link Pvt. Ltd.	Birgunj
74	Universal Trade Link*	Kathmandu
75	Upakar Medical Hall	Kathmandu
76	Ways International Pharma Division	Kathmandu
77	Yeti Pharmachem Distributors Pvt. Ltd.	Kathmandu
78	Yetichem Distributors Pvt. Ltd.	Kathmandu
79	Zen Pharmaceuticals (Pte) Ltd.	Kathmandu

\*Drugs were not imported.

#### **B. Veterinary Importers**

1.	Bhajuratna Pharma Pvt. Ltd.	Birgunj
2.	Bhatbhateni International Pvt. Ltd.	Kathmandu
3.	Biovet Pharma	Kathmandu
4.	Divas Vet. Enterprises	Janakpur
5.	Kathmandu Pharma Vet. Pvt. Ltd.	Kathmandu
6.	Luna Trading	Birgunj
7.	Munal Biovet Pharma	Kathmandu
8.	Nepal Vet. Trading	Birgunj
9.	Nimbus International Co. Pvt. Ltd.	Kathmandu
10.	Pharmachem Pvt. Ltd.	Birgunj
11.	Sabha International Trading	Kathmandu
12.	United Pharma INC	Kathmandu
13.	Veterinary Concern Pvt. Ltd.	Kathmandu

### **C. Homeopathic Importers**

- |  |            |
|--|------------|
| 1. Arati Impex                         | Kathmandu  |
| 2. Everest Homeo Medico                | Itahari    |
| 3. Jyoti Homeo Clinic                  | Biratnagar |
| 4. Shreejana Pharmaceuticals Pvt. Ltd. | Kathmandu  |

### **D. Ayurvedic/Unani Importers**

- |   |            |
|---|------------|
| 1. Aaju Pharmaceuticals                         | Kathmandu  |
| 2. Alpha Medicine Distributors                  | Kathmandu  |
| 3. Anil Medical Hall                            | Lahan      |
| 4. Anurag ayurvedic Concern                     | Butwal     |
| 5. Excel Trading Concern                        | Birgunj    |
| 6. Ganesh Pharma                                | Janakpur   |
| 7. Ganga Aushadhalaya                           | Chitwan    |
| 8. Glory Pharma Distributors                    | Birgunj    |
| 9. GMP Pharma                                   | Kathmandu  |
| 10. Godavari Ayurved Store                      | Birgunj    |
| 11. Himalaya Co.                                | Biratnagar |
| 12. Himgiri Medico Pharmaceuticals Distributors | Biratnagar |
| 13. Jalan Pharma Distributors                   | Janakpur   |
| 14. Janata Ayurved Bhawan                       | Butwal     |
| 15. Jaya Medico Distributors                    | Nepalgunj  |
| 16. Laxmi Trade Concern                         | Biratnagar |
| 17. Life Ayurved Aushadhalaya                   | Butwal     |
| 18. Lok Priya Pasal                             | Birgunj    |
| 19. Lumbini Impex Pvt. Ltd.                     | Kathmandu  |
| 20. Luna Trading Company Pvt. Ltd.              | Birgunj    |
| 21. Maheshwori Distributors                     | Kathmandu  |
| 22. Medico Enterprises                          | Kathmandu  |
| 23. Mediwave International                      | Kathmandu  |
| 24. Nepal Drug Distributors                     | Kathmandu  |
| 25. Pasupati Ayurved Bhawan                     | Bhairahawa |
| 26. Pharmachem Pvt. Ltd.                        | Birgunj    |
| 27. Popular Pharma                              | Biratnagar |
| 28. R. S. Enterprises                           | Kathmandu  |
| 29. Raghav Agencies and Trading Co.             | Nepalgunj  |
| 30. Rajesh Medicine Distributors Pvt. Ltd.      | Gaur       |
| 31. Shankharapur Pharmaceuticals                | Kathmandu  |
| 32. Shiv Ayurved Stores                         | Kathmandu  |

33. Shree Ram Concern	Birgunj
34. Shree Ram Drug House	Birgunj
35. Sunrise Herbal Medicine Distributors	Birgunj
36. Themjo Enterprises	Kathmandu
37. Upakar Medical Hall	Nepalgunj
38. Welmed Distributors	Biratnagar

### **4.3. Data Collection**

The data were collected by using four different instruments (Annexes). The instruments were field-tested in Kathmandu involving the research assistants and supervisors. Prior to the field-testing, the research team was oriented by the investigators. The field-tested instruments were presented to DDA and finalized incorporating comments and suggestions from them. The research assistants were undergraduate students from health sciences. The supervisors were graduates from health sciences. The data were collected by eight teams, each team comprising research assistants and a supervisor.

#### **Data collection from domestic manufacturers included**

- Value of drugs produced
- Value of drugs expired/damaged
- Value of sold drugs returned to manufacturer
- Value of drugs sold
- Value of free samples
- Value of drugs distributed as bonus
- Total cost of raw material including excipients and packaging materials.

The data on cost of raw materials including excipients and packaging materials were not obtained from the industries.

#### **Data collection from importers included**

- Value of total import and sale.
- Balance at the end of the fiscal year.
- Average percentage of expiry drugs.
- Total percent of free samples.
- Commission to the stockist.
- Commission to the importers.

However, data on balance at the end of fiscal year, value of expired drugs, value of free samples, commission to importers/ stockist were not obtained.

### **Data collection from the custom points**

The data were to be collected from 9 custom points but data were not available on visits to custom points and finally the total import value of drugs was obtained from the Department of Custom.

### **Data collection from the Department of Health Services and hospitals included**

- Total amount imported

### **UN agencies / International agencies / INGOs / NGOs included**

- Total amount imported for their own use or supply to the government

### **4.4. Data Analysis**

The data from each unit were entered into Excel and analyzed for the following:

#### *Data from importers*

- ◆ Total import value
- ◆ Total sales value

The value of the drugs at retail level is calculated on the following basis. However, there may be some variation in practice.

Importers add 7.5% to the import value as custom duty and handling charge. To this figure 6% is added as an average importers commission. To this figure wholesaler adds about 10% to sell to the retailer. Retailer adds 16% to this figure to make retail price. On an average 20% is added as the value of goods provided as bonus.

#### *Data from domestic industries*

- ◆ Total production value
- ◆ Total sales value
- ◆ Bonus value

To calculate the retail sales value the following factors are used

- ◆ 10% wholesale commission, and
- ◆ 16% retail commission
- ◆ 20% as the value of the goods provided as bonus

#### *Data from customs*

- ◆ Total import value

### *Data from Government Institutions*

- ◆ Total import value

### *UN agencies / International agencies / INGOs / NGOs*

- ◆ Total import value

### *Top fifteen selling modern medicines from domestic industries*

The following data is used to find out the top 15 selling modern medicines

- Data on sale of top selling 15 medicines by sales value.

## **5. RESULTS**

The followings are the results based on the data.

### **5.1. Drug import and sales**

Table IV shows the import value based on data available from the importers. Allopathic drugs worth 2 billion and 250 million rupees were imported into Nepal through 52 importers, but data were not available from other 8 importers. Similarly, ayurvedic/ unani drugs worth 342 million rupees, veterinary drugs worth 70 million rupees from 4 importers and homeopathic drugs worth 5 million were imported. Allopathic drugs worth 6 billion 276 million rupees in retail value were sold during the fiscal year (based on data from all 60 importers). Likewise ayurvedic/unani drugs worth 557 million rupees, veterinary drugs worth 155 million rupees (based on data from all 7 importers) and homeopathic drugs worth 19 million rupees (based on data from all 2 importers) were sold in the same year. On an average, 20 percent, in value, was provided as bonus.

**Table IV A: Drugs Import Value for 52 responding importers**

System	No of Importers	Import Amount		
		Data Not Available (Number)	Data available (Number)	Value (Rs.)
Allopathic	60	8	52	2,250,760,110
Ayurvedic/Unani	24	-	24	342,258,103
Veterinary	7	3	4	70,474,820
Homeopathic	2	-	2	5,351,915

**Table IV B: Drugs Sales at Retail Value (all importers)**

System	No of Importers	Retail Sales Value (Rs.)*
Allopathic	60	6,276,835,164
Ayurvedic/Unani	24	557,262,099
Veterinary	7	155,430,729
Homeopathic	2	19,322,176

\* Sales Value including bonus. (See 4.4 for method of calculation)

The table V shows, the value of allopathic drugs imported through government institutions (including the drugs imported by UN and international agencies for the government supply) as well as INGOs/NGOs and hospitals. The total value of such import was worth 939 millions rupees. The data does not include imports by diplomatic agencies (Embassies).

**Table V: Import from Government Agencies/ NGOs/ INGOs**

Institutions	Drugs	Vaccines	Import Amount (Rs.)
Logistic Management Division (LMD)	132,869,214	281,756,791	414,626,005
National STI and HIV/AIDS Canter	2,043,715	-	2,043,715
National Tuberculosis Center (NTC)	33,254,472	-	33,254,472
Nepal Eye Hospital( Netra Jyoti Sangha)	489,012,230	-	489,012,230
Manipal Teaching Hospital	129,245	-	129,245
<b>Total</b>	<b>657,308,876</b>	<b>281,756,791</b>	<b>939,065,668</b>

## 5.2. Domestic manufacturing and repackaging industries

Table VI shows the value of drugs produced and sold from the domestic drug manufacturing industries. The production value, which is worth 991 million rupees, is data available from 20 allopathic industries. This value was not available from other 19 industries. Allopathic drugs worth 3 billion 442 million rupees in retail value were sold (based on data from all 39 industries). Similarly, ayurvedic/unani drugs worth 62 million rupees and veterinary drugs worth 14 million rupees were produced from the domestic industries who provided the data (12 out of 18 ayurvedic and 2 out of 4 veterinary industries). Ayurvedic/unani medicines worth 172 million rupees and veterinary drugs worth 80 million rupees in retail value were sold (based on data from

all 18 ayurvedic/unani and all 4 veterinary industries). On an average 20% of total sales by domestic industries was offered as bonus or deals (as free goods).

**Table VI A: Production Value of Domestic Manufacturing and Repackaging Industries**

System	No of Company	Production		
		Data not Available (Number)	Data available (Number)	Value(Rs.)
Allopathic	39	19	20	991,206,851
Ayurvedic/Unani	18	6	12	62,931,464
Veterinary	4	2	2	14,982,088
Homeopathic	-	-	-	-

**Table VI B: Sales at Retail Value of Domestic Manufacturing and Repackaging Industries**

System	No of Company	Retail Sales Value (Rs.)*
Allopathic	39	3,442,475,282
Ayurvedic/Unani	18	172,245,285
Veterinary	4	80,172,397
Homeopathic	-	-

\* Sales Value including bonus. (See 4.4 for method of calculation)

### 5.3. Data from customs

Table VII shows the value of drugs imported into the country. It does not include the value of drugs imported from diplomatic agencies (Embassies). The drugs imported from the diplomatic agencies could not be figured out.

**Table VII: Data from Custom**

System	Import Amount (Rs.)
Allopathic	346,15,75,000
Ayurvedic/Unani	27,81,96,000
Veterinary	292,58,000
Homeopathic	370,45,000
<b>Total</b>	<b>380,60,74,000</b>

### Top 15 Selling drugs from domestic industries

Table VIII shows, top 15 selling drugs from the domestic manufacturers. Amoxicillin in its different dosage forms shared about 8.6% of the total domestic sales. It was followed by vitamins, cough preparations and metronidazole and its combination.

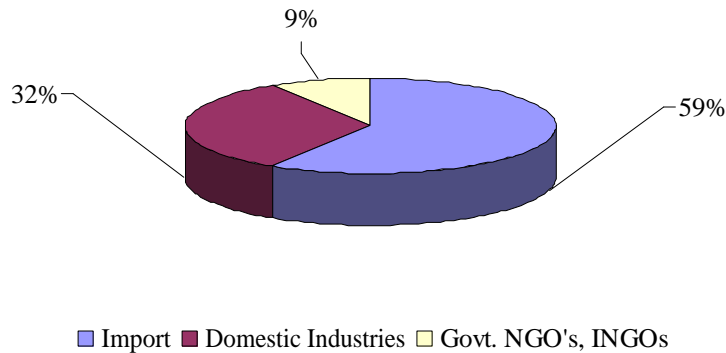
**Table VIII: Top 15 Selling drugs from Domestic Industries**

Rank	Drug Generic	Consumption In Rs "000"	% of Total Domestic products
1	Amoxicillin	275097	8.6
2	Vitamins	195428	6.1
3	Cough Preparations	145825	4.6
4	Metronidazole & Metro + Diloxanide	111410	3.5
5	Ibuprofen + Paracetamol	99846	3.1
6	Ciprofloxacin	87037	2.7
7	Cold Preparations	83923	2.6
8	Cotrimoxazole	77979	2.4
9	Iron & Folic acid	75540	2.4
10	Paracetamol	69800	2.2
11	Ampicillin + Cloxacillin	67360	2.1
12	Nimesulide	54079	1.7
13	Ofloxacin	53276	1.7
14	Omeprazole	48286	1.5
15	Cefadroxyl	47437	1.5
	<b>Total Rs.</b>	<b>1492326</b>	<b>43.3</b>

#### 5.4. Share of drug consumption by import through public and private sector and by domestic industries

Fifty-nine percent of drug consumption is met through import by private sector. Non-commercial sector shares 9%. Similarly, 32% of drug consumption is met through domestic industries.

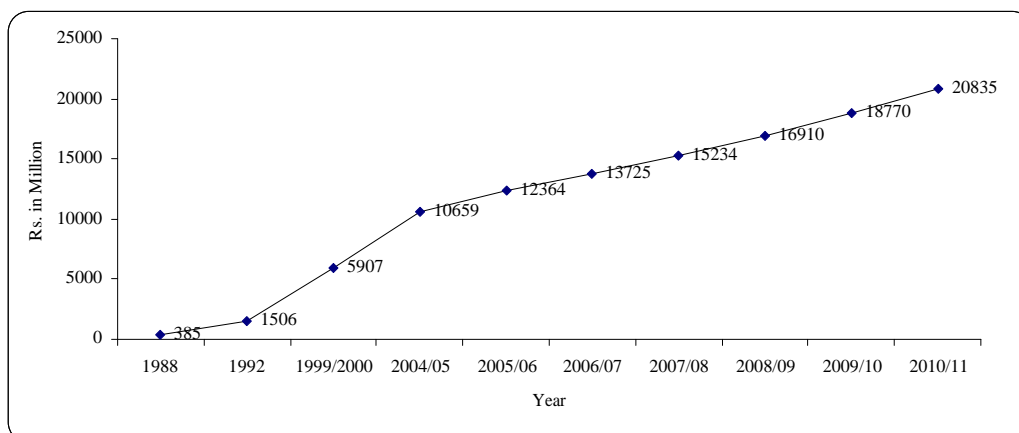
Share of Drug Consumption through Import and Domestic Industries



Considering the total sale of allopathic medicine from commercial sector, amounting Rs. 9719.3 million, the share of import is Rs. 6276.8 million (64.6%) and domestic production is Rs. 3442.5 million (35.4%).

#### 5.5. Total consumption and annual increment of allopathic drugs

The allopathic drug consumption has been increased from Rs. 5907 million in year 1999/2000 to Rs. 10659 million in the year 2004/05. It shows the consumption has increased by Rs. 4752 million in the last five years, which is 80.4% more than 1999/2000 figures. It shows an average annual increment of 16.1%



## **6. RECOMMENDATIONS**

- The top 15 drugs produced in the country shared 43.4% of the total sales from the domestic industries. Seven drugs are from the National List of Essential Drugs. The domestic industries should be encouraged for production of essential drugs.
- The consumption of drugs by therapeutic groups including antibiotics should be estimated. It will support to formulate strategy for local production.
- Effort should be made to reduce the profit margin at various levels of sales channel, so that the medicines are available at cheaper price to the consumers.
- National production should be encouraged to reduce the dependence on import.

## **7. CONSTRAINTS/LIMITATION**

- Some data were not available from few domestic manufacturing industries.
- Most of the importers did not make available data of expiry/damage, free samples and resalable amount. Similarly, most of domestic industries did not make available production amount, expiry/damage, free samples and resalable amount.

## **8. CONCLUSION**

The study shows the consumption of allopathic drugs in the fiscal year 2061/62 (2004/05) has been Rs. 10659 millions. The annual increment of allopathic drugs consumption has been 16.1%. Thirty-two percent of allopathic drugs consumption is met by national industries. Considering the commercial sector only, 64.6% is the share of import and 35.4% is the share of domestic production of the allopathic medicine.

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## **EXECUTIVE SUMMARY**

Drugs are one of the important components in the delivery of health care. For effective drug management a proper selection, quantification, procurement, distribution and use are important.

The objective of the study was to estimate the consumption of modern, veterinary, ayurvedic/unani and homeopathic medicines. The study covered fiscal year 2061/62 (2004/2005) and data were collected from following sources

- Private importers
- UN Agencies / International Agencies/ NGOs/ INGOs
- Domestic manufacturing and repacking industries.
- Department of Custom
- Logistic Management Division (LMD), Department of Health Services.
- National Tuberculosis Center (NTC)
- National STI and HIV/AIDS Center.
- Public and private medical colleges importing drugs.

The data from each unit were entered into Excel and analyzed.

The results show:

- Allopathic drugs worth Rs. 6 billion 276 million in retail value were sold through importers.
- Ayurvedic/unani drugs worth Rs. 557 million, veterinary drugs worth Rs. 155 million and homeopathic drugs worth Rs.19 million were sold through importers.
- The total value of drugs imported by Government, UN agencies, INGOs/ NGOs and hospitals was Rs. 939 millions.
- Allopathic drugs worth Rs.3 billion 442 million in retail value were sold from domestic industries.
- Ayurvedic/unani drugs worth Rs.172 million and veterinary drugs worth Rs. 80 million in retail value were sold by domestic industries.

- On an average 20% of total medicine (in value) was offered as bonus or deals (as free goods) by domestic and foreign industries.
- The value of drugs (including veterinary, homeopathic and ayurvedic) imported through different custom points was worth Rs.380 million.
- Amoxycillin was highest selling drug from domestic industries.
- Thirty-two percent of drug consumption is met through domestic industries, fifty-nine percent is imported through private sector importers and nine percent by non-commercial sector.
- Total consumption of allopathic drugs was Rs. 10659 million. Out of this figure, Rs. 9719.3 million is from the commercial sector, out of which 35.4% is produced locally and 64.6% is imported.
- The average annual increment of allopathic drug consumption is 16.1%

*(Approximately Nepalese Rupees 72. is equivalent to 1 U.S. dollar)*