

Bisleri Plantation

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Date Of Submission: 01-03-2021

Date Of Acceptance: 14-03-2021

ABSTRACT:- Globalization and Liberalization are the Mantras of the new economy today, which is now on the fast track. Marketing management states the evolution of planning and execution of goods and services to meet the objectives of an individual or organization. It plans and develops the product on the basis of consumer needs. The focal point of marketing strategies to provide all needs and wants of the consumers. Effectiveness of marketing management can be evaluated by consumer preferences and marketing managers' perspectives. It started with identification of customer set and their need structure. It implements the strategies and programmers to achieve the goals of market. Optimum utilization of resources and effort to deliver higher value to consumer and get great profit are the purpose of the marketing.

I. INTRODUCTION:-

It is needless to mention that water, a compound of hydrogen and oxygen is a precious natural gift which is very essential for survival of mankind including animals. The water used for portable purposes should be free from undesirable impurities. The water available from untreated sources such as Well, Boreholes and Spring is generally not hygienic and safe for drinking.

Thus it is a desirable and necessary to purify the water and supply under hygienic conditions for human drinking purpose as the name implies. The mineral water is the purified water fortified with requisite amounts of minerals such as barium, iron, manganese etc., which can be absorbed by human body.

It is either obtained from natural resources like spring and drilled wells or it is fortified artificially by blending and treating with mineral salts. The mineral water shall be manufactured and packed under hygienic conditions in properly washed and cleaned bottles in sterilized conditions.



MARKET POTENTIAL:-

Unfortunately sufficient safe portable water is not available everywhere in the country, either harmful chemical substances are found in the layers of earth which enter into water or it may be contaminated due to pathogenic micro-organisms.

If such water is consumed, the body suffers from water-borne diseases. Due to this, it has become imperative to process and bottle safe portable water for mankind in prevailing conditions. The demand for purified water becomes more during summer season.

Although few companies have already entered in the bottling of safe portable water and mineralized water, but still a huge gap is there in between demand and supply at all metropolitan cities and towns.

The product is widely accepted in offices, restaurants, railway stations, airport, but stands, hospitals and to some extent in rich households. So there is good scope for establishing the units for processing and bottling plain and mineralized

drinking water in different parts of the country.

BASIS & PRESUMPTIONS:-

I. This project is based on single shift basis and 300 working days in a year.

II. The cost of machinery & equipment /materials indicated refer to a particular make and the prices are approximate to these prevailing at the time of preparation of this profile.

III. The cost of packaging, forwarding tax etc and installation electrification of machinery is taken @ 15% non-refundable deposits, project cost, trial production, fees etc are considered under pre-operative expenses.

VI. Minimum 40% of the total investment is required as margin money.

VII. Pay back period of the project will be 7 years, with half yearly installments.

VIII. Break even point has been calculated at the full capacity utilization. stock of quality raw material IX. For smooth functioning of unit it is suggested that

IMPLEMENTATION SCHEDULE:-

The following steps involves in the implementation of the project activity

I. Selection of Site.

II. Form of Ownership.

III. Feasibility Report.

IV. Entrepreneurship Memorandum

V. Arrangement of Finance

VI. Construction of Factory Shed & Building

VII. Plant Erection and Electrification

VIII. Recruitment of Manpower

IX. Arrangement of raw materials including packaging materials.

X. Selection of marketing channel.

XI. Miscellaneous power and water connection, Pollution Control Board clearance

TECHNICAL ASPECTS:-

(i) Process of Manufacture:

Raw water to be processed is collected in tanks. A known quantity is pumped in to the above tank where the water is dozed with alum for coagulation with heavy metals or insoluble matters.

The water after coagulation is allowed to settle for an hour. The impurities may be removed by reserved osmosis techniques also.

The supernatant water is taken to the chlorination tank where primary disinfection is about by bubbling chlorine gas. The water is then passed through sand for trapping of undissolved impurities. The water after sand filtration is passed through carbon filters for removal of odour, colour and also for dechlorination. It is then passed through series of micro fillers comprising 5 micron, 1 micron and 0.4 micron filter followed by ultraviolet disinfection system for terminal disinfection.

Packing is done in PET bottles of 1 litre capacity through an automatic rinsing, filling and capping machine fitted with an ozone generator. The bottle after capping are shrink wrapped (optical) and packed in corrugated boxes of one dozen each.

ii) Quality Control and Standards:

The plain drinking water has to be bottled in pet bottle as per IS:14543:1998.

(iii) Motive Power: 50 HP

(iv) Production Capacity (Per Annum):

(v) Pollution Control:

The unit will not create any pollution problems. However, entrepreneur should obtain NOC from concerned State Pollution Control Board.

(vi) Energy Conservation:

Suitable measures should be adopted to use electricity

FINANCIAL ASPECTS: -

A) Fixed Capital:

(i) Land & Building Area Amount

1. Land – Total covered area required for filtration 500 sq. mtr. @ 1200/ sq. mtr. 3.00 lakhs

2. Building Raw Material Storage, Packaging Material Storage, Machinery, Spare parts, Store Finished Goods, Office, Quality Control Lab. Toilet, electrical Switch Room and misc. 400 sq. mtr.

3. Boundary Wall and Civil work on gate etc. 1.00 lakh Total: 27.00 lakhs



(ii) Machinery & Equipment:-

Sl. No	Particulars of Machines	Qty. (Nos.)	Amount (Rs. lakh)
1.	Sand Filter	1	0.80
2.	Chlorination Tanks made of S. Steel with Electronic Doser	2	1.50
3.	Alum Treatment Tanks with Electronic Doser	3	1.50
4.	Activated Carbon Filter	1	0.80
5.	Reverse Osmosis Plant 2000 Lit.	1	8.00
6.	Micron Filters	3	0.60
7.	Ultra violet Disinfectant System	1	0.50
8.	Ozone Generator	1	3.50
9.	Raw and purified water collection tanks with motor & accessories	4	2.00
10.	Automatic Rinsing Filling and Capping Machine	1	8.00
11.	Shrink Wrapping Machine for Bottle – 0.15	1	0.30
12.	Miscellaneous Tools & Equipments, Pipeline etc. Plastic Crates etc.	1	2.00
13.	Laboratory Testing and Quality Control, Micro-Biological Instruments etc.		2.00
	Total:		31.50
	Electrification and installation charges @10% of Plant & Machinery.		3.15
	Total:		34.65

MANUFACTURING PROCESS:-

Mineral water production follows various steps. Raw water to be processed is collected in tanks. A known quantity is pumped into the above tank where the water is dozed with alum for coagulation with heavy metals or insoluble matters. The water after coagulation is allowed to settle for an hour. The impurities may be removed by Reverse Osmosis techniques also.

The supernatant water The supernatant water is taken to the chlorination tank where primary disinfection is brought about by bubbling chlorine gas. The water is then The water is then passed through sand filters for trapping of undissolved impurities. The water after sand filtration is passed through Carbon filters for removal of odour, colour and also for dechlorination. It is then passed through series of micro fillers comprising 5 microns, 1 micron and 0.4-micron filter followed by ultraviolet disinfection system for terminal disinfection. The last step is packing.

According to the requirement, packing is done through an automatic rinsing, filling, and capping machine fitted with an Ozone generator.

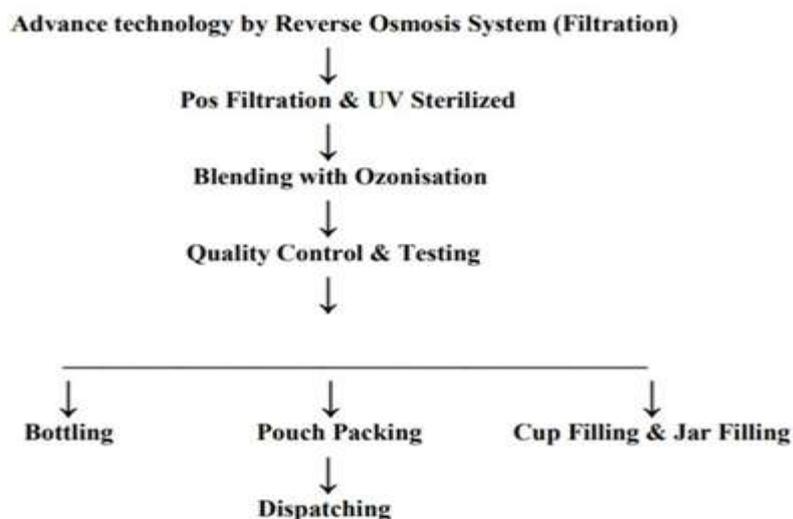
The bottles after capping are shrink wrapped (Optional) and packed in corrugated boxes of one dozen each. Apart from raw water other require raw material are chemicals, reagents, pouches, bottles, jars and outer cartoons. In mineral water plant, major required utility is electricity.

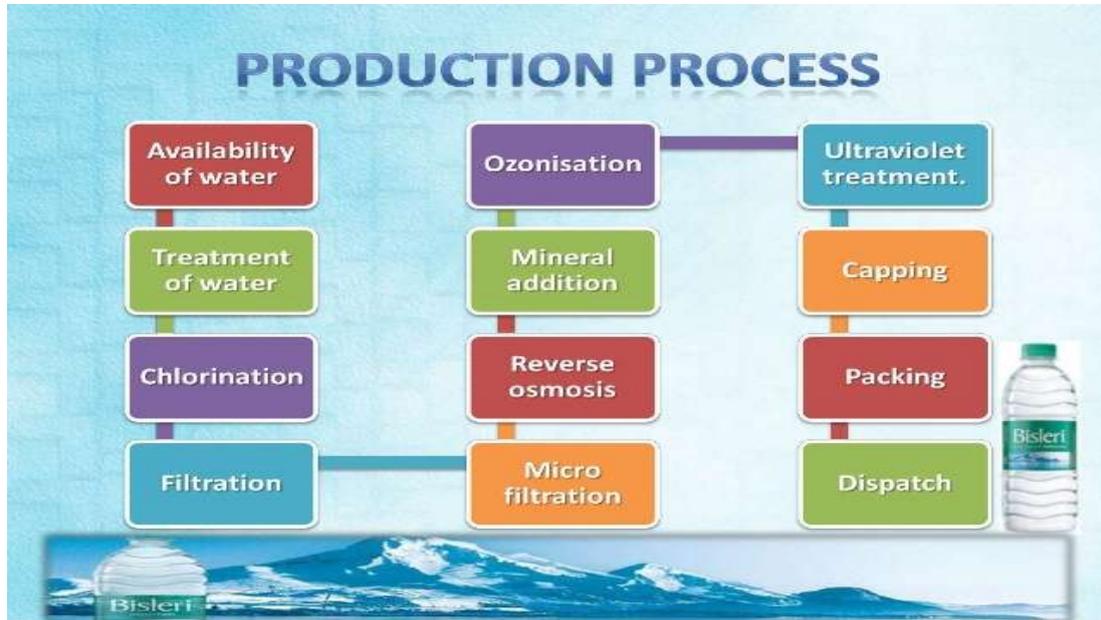
How can I buy the machines and equipment?

After selecting the type of the machines or equipment you want to buy, we will send you the Profoma Invoice indicating the price of the machine and all other related charges. To order the machine, you will have to make a deposit of 70% of the machine price where as 30% balance payment will have to be paid before discharging the machine. Some of the machines are discharged from our Headquarters in South Africa and some from our regional office in Dar es Salaam, Tanzania and Harare, Zimbabwe.

After selecting the type of the machines or equipment you want to buy, we will send you the Profoma Invoice indicating the price of the machine and all other related charges. To order the machine, you will have to make a deposit of 70% of the machine price .

THE BASIC MANUFACTURING PROCESS CONSISTS THE FOLLOWING STEPS





TREATMENT SCHEME & FILTRATION SYSTEM:-

RAW WATER TANK CLIENT SCOPE

↓
RAW WATER PUMP

↓
MULTI GRADE FILTER

↓
ACTIVATED CARBON FILTER

↓
BLENDING SYSTEM (TDS ADJUSTMENT)

↓
SP. ANTISCALENT DOSING SYSTEM.

↓
MICRON CARTRIDGE FILTER

↓
HIGH PRESSURE PUMP

↓
R. O. MODULES

↓
PRODUCT WATER STORAGE TANK ↓

↓
PRODUCT WATER TRANSFER PUMP

↓
POST MCF FILTER UNIT – I

↓
POST MCF FILTER UNIT – II

↓
ULTRA VIOLET STERILIZER UNIT

↓
OZONE RE-CIRCULATION TANK

↓
OZONE RE-CIRCULATION PUMP

↓
OZONATION SYSTEM & TANK

↓
DISPTCH & PAKAGING

Price, Commercial Terms & Condition:-

1)PRICE ::

Our price for Design & Engineering of proposed water treatment system,

based on R.O. System as described in our earlier Annexure shall be 2000

LPH..... S.S. 316 ...Rs. 8,51,000/- (Rupees Eight Lac Fifty One Thousand Only)

Our price is Ex-works (Factory) and Exclusive of Transportation up to your site.

EXCISE DUTY: Extra at actual, if applicable. At present Nil.

SALES TAX: Extra at actual, @ 5 % VAT.

OCTROI : Extra at actual, if applicable.

However, any change in Govt. levies / interpretation / etc. at the time of Execution will be on Buyer's Account.

PAYMENT TERMS: 70% Advance with clear P O 30% against performa Invoice prior to dispatch 05% of Erection & commissioning charges.

DELIVERY :: Within 8-10 weeks from the date of receipt of P O along witAdvance subject to Force Major Clause.

VALIDITY :: 30 DAYS

GUARANTEE / WARANTEE

The water treatment system supplied is guaranteed for a period of 12 months from the date of commissioning OR 18 Months from the date of last major supply, whichever is earlier. Equipment guarantee is valid against defective workmanship and / or poorperformance of the system only. Our liability is limited to repair or replace the

FOREIGN EXCHANGE VARIATION CLAUSE :-

We have considered the prevailing foreign exchange market rates at the date and time of our proposal for our imported components. However, any change in the Foreign Exchange rates at the date and time of issuance of Purchase Order will be .

QUOTATION FOR: - JAR WASHING & FILLING MACHINE.

Ref :- As per Personal Matting.

Respected Sir,

We are very much thankful for showing your keen interest in our water treatment range of products & very much thankful for furnishing us an opportunity this will be a small

but significant step in establishing the long lasting ad mutually beneficial

relationship between A-ACCURATE and your Good Self.

1- 20 LTRS. Jar washing machine two head hot washing & normal washi Machine

2- 20 LTRS. Jar FILLING machine two head.

Our price is Ex- works (Factory) and Exclusive of - Transportation up to your site - Packing Forwarding , Lading & Unloading charges extra (Apex 5%)

EXCISE DUTY :: Extra at actual, if applicable. At Present Nil

SALES TAX :: Extra at actual, at present 5% VAT or Against Form 'C'

OCTROL :: Extra at actual, if applicable.

However, any change in Govt. levies / interpretation etc. at time of Execution will be

PAYMENT TERSM :- 80% Advance with clear PO, 20% against prior to dispatch.

DELIVERY :With in Six - Eight Week.

QUOTATION FOR POUCH MACHINE:-

KIND ATTN.: Managing Director

Dear Sirs,

We are very much thankful for showing your keen interest in our water treatmen & are very much thankful for furnishing us an opportunity. This will be a small but significant step in establishing the long lasting and mutually beneficial relationship between ACCURATE and As per your requirement, we are very much pleased to submit our proposal foBottlesealing & filling machine as per following specification.

TECHNICAL SPECIFICATION :-

Type of sealing : Three side seal

Production capacity : 30-36 Pouches / Minute

Packing range : 50 ml to 1 Ltrs.

Power : 0.5 HP + 0.5 HP, I Phase, 6 Kva,

Dimensions : L – 1300 mm X H-1350 mm X W-690 mm

Weight : 800 Kgs. (Aprox.)

Plastic bag : 50 to 70 Micron

SALES TAX :: Extra at actual, at present 4% +1% VAT

OCTROI : Extra at actual, if applicable.

PAYMENT TERMS :: 80% Advance with clear P O, 20% against prior to dispatch.

DELIVERY :: With in One – Two Week after receiving your clear P.O.

Model Number	DS 24
Production capacity	1440 Butt/Hr.
Production Capacity for 2 Liters	1440 Bottles / Hour and 720 Bott/Hr.
Filling Capacity	200 ml to 2000 ml
Neck Description	Standard for full range
Voltage	380 V / 3 Ph / 50Hz
Total Power	8 Kw
Unit Dimensions (L x D x H)	3000 x 2200 x 2150
Max Air pressure	0.4 m ³ /min, 6-7 Bar
Wash Stages	2 Stage
Stainless Steel Grade	316 for product contact, all rest 314
Rinsing & Washing Heads	8 to 12
Filling Heads	4 to 6
Capping Heads	2
Structure	Mono block
Bottle Type	PET Bottles only (NO GLASS)



QUOTATION FOR BOTTLING MACHINE:-

General Features:-

- New neck handling free suspension machines, helps to make bottles change
- easy, can change from one bottle size to another in matter of minutes
- All Full Stainless steel neck handling disc
- Inside and outside rinsing of Bottles
- Inside Recycle water tank to remove dirt
- Hot water for Wash cycle, with adjustable Heater temperature up to 60C
- Fully sealed units with large tempered glass

windows for observation

- All transfer parts lower than filling valve
- No filling when there is no bottle, saving water
- Magnetic screwing heads with capping torque adjustable from 7-25 inch/pound
- All Parts contacting with finished product are made of AISI 316 and Anti-Ozone Food Mitsubishi PLC controller equipped to make the entire process fully automatic
- Cap to be rinsed with final wash to remove any dirt and clean the cap
- All pipes are concealed to give better look and

- increase floor space
- Insulated Hot water tank to save energy
- Extremely Quite machine
- Low water sensor electric probe in the product tank to control the water level

COST OF PRODUCTION:-

For Bottle: 1 Ltr

Cost Incurred For Bottle Of 1 Ltr.

- A. Cost Of Bottle + Cap Rs. 2.20
 - B. Cost Of Label Shring Rs. 0.15
 - C. Cost Of Cap Shring Rs. 0.05
 - D. Cost Of Water Rs. 0.03
 - E. Cost Of Misc Rs. 0.05
 - F. Cost Of Interest Per Liter Capital Investment Rs. 0.03
 - G. Packing (Cartoon) Cost Per Bag Rs. 0.30
- Total Costing Of 1 Ltr. Bottle Rs. 2.81

For Pouches: 250ml.

Cost Incurred In Mfg. 1 Pouch Of 250ml Water

- A. Cost Of Empty Pouch With Printing Rs. 00.05
 - B. Cost Of Water 250ml. Rs. 00.0075
 - C. Cost Of Mislenious Rs. 00. 001
 - D. Cost Of Interest Per Liter On Capital Investment Of 250ml. Rs. 00.0042 Total Costing Of 1 Pouch Of 250ml. Rs. 00.0627 For Zar (Carvoys) : 20 Ltrs. Cost Incurred In Mfg. 1 Zar Of 20 Ltrs. Water
 - A. Cost Of Transportation Rs. 00.30
 - B. Cost Of Water 20 Ltrs. Rs. 00.60
 - C. Cost Of Mislenious Rs. 00. 01
 - D. Cost Of Interest Per Liter On Investment Of 250ml. Rs. 00.30
 - E. Cost Of Maintainous Rs. 00.10
- Total Costing Of 1 Zar Of 20 Ltrs. Rs. 01.31

II. CONCLUSIONS:-

To wrap up, above is a link to a map that I've produced roughly outlining the travels required to produce S. Pellegrino water, distribute it, and dispose of it. Bottled water, a seemingly simple product, requires incredible amounts of manpower, fossil fuels, and raw materials to go from raw source material to finalized product on shelves.

The variety of products is vastranging from bottled waters produced right here on American soil to some that are produced almost halfway across the world. The various geographical impacts bottled water production, distribution and disposal have on the entire globe are stunning and, to be frank, almost outrageous.

There were plenty of facts that surprised me Factory emissions statistics Percentage of bottles actually recycled The entire system of

beverage production and distribution, in all its complexity. But the thing that really stuck out to me was the number of bottles per American thrown into landfills. We hear talk about how landfills are rapidly filling up and we're running out of places to put all of our waste, but when you take the time to think about the impact that getting rid of bottled water would have on landfills it almost sounds like a no brainer.

There are plenty of alternatives to bottled water and it seems silly that there hasn't been a bigger push to get rid of bottled water yet. trying to argue that it needs to happen, but it seems silly to be fighting for a right to continue purchasing something that is doing so much harm to the environment that is already in enough trouble.

Our consumption and irresponsible disposal of bottled is almost like smoking cigarettes. To be more clear, cigarettes are something that a smoker could (not always) easily do without, that causes a smoker nothing but harm (physically an economically), and is only still available because we want the right to smoke to be available to us.

Purchasing and consuming bottled water as Americans is something we could do without, that causes almost nothing but harm to the environment, and is still available to us because we want the right to be able to purchase and consume bottled water. It is a drastic comparison, but I think the similarities ring true throughout.

REFERENCES:-

- [1]. LindosoTato, E.; Vilar Rodríguez, M. Orígenes e Historia Empresa Industri Embotella EUROPA : El Caso Español; Asociación Española de Historia Económica: Madrid, Spain, 2014.
- [2]. Auby, J. Les Eaux Minérales; Presses Universitaires de France: Paris, France, 1994.
- [3]. Rani, B.; Maheshwari, R.; Garg, A.; Prasad, M. Bottled water—A global market overview. Bull. Environ. Pharmacol. Life Sci. 2012, 1, 1–4.
- [4]. Birke, M.; Rauch, U.; Harazim, B.; Lorenz, H.; Glatte, W. Major and trace elements in German bottled water, their regional distribution, and accordance with national and international standards. J. Geochem. Explor. 2010, 107, 245–271. [CrossRef]
- [5]. Ferrier, C. Bottled water: Understanding a social phenomenon. J. Hum. Environ. 2001, 30, 118–119. [CrossRef]

- [6]. Brei, V. How is a bottled water market created? WIREs Water 2017, 5, e1220. [CrossRef]
- [7]. Botto, S.; Niccolucci, V.; Rugani, B.; Nicolardi, V.; Bastianoni, S.; Gaggi, C. Towards lower carbon footprint of consumption: The case of drinking water in Italy. Environ. Sci. Policy 2011, 14, 388–395. [CrossRef]
- [8]. Saad, B.; Pok, F.; Sujari, A.; Saleh, M. Analysis of anions and cations in drinking water samples by capillary ion analysis. Food Chem. 1998, 61, 249–254. [CrossRef]
- [9]. van der Linden, S. Exploring beliefs about bottled water and intentions to reduce consumption: The dual-effect of social norm activation and persuasive information. Environ. Behav. 2015, 47, 526–550. [CrossRef]
- [10]. Raj, S. Bottled water: How safe is it? Water Environ. Res. 2005, 77, 3013–3018. [CrossRef]
- [11]. Doria, M. Bottled water versus tap water: Understanding consumers' preferences. J. Water Health 2006, 4, 271–276. [CrossRef]
- [12]. Wilk, R. Bottled water: The pure commodity in the age of branding. J. Consum. Cult. 2006, 6, 1469–5405.
- [13]. Hawkins, G. The impacts of bottled water: An analysis of bottled water markets and their interactions with tap water provision. WIREs Water 2017, 4, 1–10. [CrossRef]
- [14]. Morrill, R.H.; Gaile, G.; Tharall, G.I. Spatial Diffusion; Sage Publication: Londres, UK, 1988.
- [15]. Maraver Eyzaguirre, F. Aguas minerales envasadas: Historia. Med. Natur. 2019, 13, 50–55.
- [16]. Maraver Eyzaguirre, F. Las aguas minerales naturales. In El Agua Mineral Natural en la Infancia; Asociación Española de Pediatría-Instituto de Investigación Agua y Salud: Madrid, Spain, 2009.
- [17]. De La Rosa, C.; Mosso, M.A. Historia de las aguas mineral medicinales en España. Obs. Medioambient. 2004, 7, 117–137.
- [18]. Obiol Menero, E.M. Los balnearios de Castelló. El primer turismo conocido en el Norte del País Valenciano. Cuad. Geogr. 1988, 43, 55–81.
- [19]. López Olivares, D. El desarrollo turístico integrado en los espacios turísticos de interior: Su aplicación al destino salud. Cuad. Tur. 2003, 11, 107–126.
- [20]. López Olivares, D.; Ferreres Bonfil, J.B. Propuestas de desarrollo turístico integrado para un destino turístico maduro de salud. Cuad. Tur. 2004, 13, 27–49.
- [21]. Espejo Marín, C. Las aguas de consumo envasadas en España. Tránsitos muy rentables y nada cuestionados. Pap. Geogr. 2001, 34, 125–142.
- [22]. Aguilera, L.; Armijo, F.; Maraver, F. Aguas minerales envasadas españolas: Evolución a través de sus etiquetas. Española Hidrol. Médica 1998, 13, 151.
- [23]. Baeza Rodríguez-Caro, J. Concepto de aguas minerales. In Las Aguas Minerales de España. Visión Histórica, Contexto Hidrogeológico y Perspectiva de Utilización; Baeza Rodríguez-Caro, J., López Geta, J.A., Ramírez Ortega, A., Eds.; Instituto Geológico y Minero de España: Madrid, Spain, 2001; p. 21.
- [24]. Corral Lledó, M.M.; López Geta, J.A. Génesis de las aguas minerales y termales. In Vademécum II de Aguas Minerales y Medicinales Españolas; Maraver Eyzaguirre, F., Armijo Castro, F., Eds.; Editorial Complutense: Madrid, Spain, 2010; pp. 15–30.
- [25]. Zafra Moreno, I. Aspectos legales de las aguas de bebida envasadas. In Panorama Actual de las Aguas Minerales y Mineral Medicinales en España; López Geta, J.A., Pinagua Espejel, J.I., Eds.; Instituto Geológico y Minero de España: Madrid, Spain, 2000; pp. 169–182.