

Rice Husk - A Useful By-Product for Rice Growers.

Products from Rice Husk.

List of Profitable Business Ideas of Rice Husk, Rice Hull, Rice Husk Ash (Agricultural Waste) based Projects, Waste to Wealth.

(Precipitated Silica, Activated Carbon, Cement, Electricity, Ethanol, Hardboard, Oxalic Acid, Paper, Particle Board, Rice Husk Briquettes, Rice Husk Pellet, Silicon, Sodium Silicate Projects)





Introduction

The RHA obtained from rice husk is as valuable as the rice husk in numerous applications. However, extensive R&D is required to increase the commercial consumption of RHA, as the addressable market is more of than half of the current RHA demand. Building & construction accounts for the maximum market share in terms of application followed by steel, ceramic & refractories, silica manufacturing and others.





Common products from rice husk are: solid fuel (i.e., loose form, briquettes, and pellets), carbonized rice husk produced after burning, and the remaining rice husk ash after combustion. Rice milling industry generates a lot of rice husk during milling of paddy which comes from the fields. This rice husk is mostly used as a fuel in the boilers for processing of paddy. Rice husk is also used as a fuel for power generation. Rice husk ash (RHA) is about 25% by weight of rice husk when burnt in boilers. It is estimated that about 70 million tonnes of RHA is produced annually worldwide. This RHA is a great environment threat causing damage to the land and the surrounding area in which it is dumped.



Rice Husk / Hull Ash (RHA) Contains:

- **Biogenic Amorphous Silica**
- **Carbon**
- **Un-burnt rice husk / hull**

India is a major rice producing country, and the husk generated during milling is mostly used as a fuel in the boilers for processing paddy, producing energy through direct combustion and / or by gasification. This RHA is a great environment threat causing damage to the land and the surrounding area in which it is dumped. Lots of ways are being thought of for disposing them by making commercial use of this RHA.



Rice husk is an agriculture residue abundantly available in rice producing countries. Global production of rice is approximately 580 million tons a year, and this is rising as the world population and the consumption of rice increases. Rice husk is generally not recommended as cattle feed since its cellulose and other sugar contents are low. Furfural and rice bran oil are extracted from rice husk. Industries use rice husk as fuel in boiler and for power generation. Among the different types of biomass used for power generation, rice husk has a high ash content varying from 18 – 20%, silica is the major constituent of rice husk ash.

The market has been forecast based on volume (Tons) and revenue (US\$ Mn) from 2017 to 2025, considering 2016 as the base year.



The global rice husk ash market is chiefly driven by the rising application in the building and construction industry, followed by the demand witnessed in the steel industry, which uses rice husk ash for insulation activities. Primarily rice husk ash is used as a source of silica. Silica is present in rice husk ash in large content, which makes silica extraction quite economical. Bearing in mind the high demand for amorphous silica in response to its augmenting use in cement and concrete used in the construction of roads and nuclear plants, the global rice husk ash market can expected lucrative prospects in the coming years. In spite of its high application in the construction sector, health concerns that arise from the use of amorphous rice husk ash may restrain the market's growth trajectory to an extent.

In the coming years, the global rice husk ash market is likely to benefit from many commercial opportunities at the back of its potential. For instance, due to its excellent properties, the use of rice husk ash as thermal insulation materials has considerably increased. Besides this, the market has witnessed the rising use of rice husk ash as refractories, soil fertilizers, building materials, and water and oil filters over the last few years. Commercially, the market has significantly benefitted from the rising application as building materials, widely accepted worldwide. Other applications of rice husk ash include its use as a raw material in the manufacturing of high purity silica.

Sodium silicate products are manufactured as solids or thick liquids, depending on proposed use. For instance, water glass functions as a sealant in metal components. Finally, even though, sodium silicate manufacture is a mature industry, there is current research for new applications given its heat conductive properties.

The future demand for sodium silicate is a function of growth of the end-user industries, mainly soap and detergent factories, pulp and paper mills, paint, pigment and adhesive factories.

Use of rice husk ash with cement improves workability and stability of the concrete mixture. It reduces heat generation, thermal cracking, and plastic shrinkage of the material. It also helps in increasing strength, impermeability, and durability of the mixture during the setting period by modifying the pore-structure and blocking the large voids in the hydrated cement paste through pozzolanic reaction. The properties of rice husk ash improves the performance of cement, bricks, and other construction materials. Increasing demand for rice husk ash in the building & construction application segment is one of the major factors fueling the growth of the overall rice husk ash market.



Niir Project Consultancy Services (NPCS) can provide Detailed Project Report on Required Project

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Here are few Projects for Startup:

➤ **PRECIPITATED SILICA FROM RICE HUSK**

Rice husk is an agricultural residue easily available in rice producing countries. India is a major rice producing country, and the husk generated during milling is mostly used as a fuel in the boiler for processing paddy, producing energy through direct combustions or by gasification. [Read more](#)



➤ **EXTRACTION OF ULTRA PURE SILICON FROM RICE HUSK**

Rice milling industry generates a lot of rice husk during milling of paddy which comes from the fields. This rice husk is mostly used as a fuel in the boilers for processing of paddy. Rice husk ash (RHA) is about 25% by weight of rice husk when burnt in boilers. This husk is used as fuel in the rice mills to generate steam for the parboiling process.

[Read more](#)





➤ **PARTICLE BOARD FROM RICE HUSK**

Rice hulls (or rice husks) are the hard protecting coverings of grains of rice. Construction industry is one of the fastest growing sectors in India. Rapid construction activity and growing demand of houses has led to the short fall of traditional building materials. Bricks, Cement, sand, and wood are now becoming scares materials. [Read more](#)





➤ CEMENT FROM RICE HUSK

Rice husk gives a good quality of pozzolanic ash containing silica, which is considered a good substitute for cement. It is prepared by first burning husk to form ash and then mixing it with lime and grinding it to a very fine powder. Cement is a very important building material, but today it is very much short in supply. [Read more](#)



➤ **SILICON FROM RICE HUSK**

Rice husk is a byproduct of agriculture a byproduct while is almost treated like waste and not serously bothered about. Consider, India's case every year about 60 million tonnes of paddy grown in the country produces upto 12 million tonnes of rice husk in over 900,000 rice mills spread around the country. [Read more](#)



➤ SILICA FROM RICE HUSK

The rice husk contains about 75% organic volatile matter & the balance 25% of the weight of this husk is converted into ash during the firing process, is known as rice husk ash (RHA). This RHA in turn contains around 85% to 92% amorphous silica. Silica is one of the valuable inorganic chemical compounds. [Read more](#)



➤ SODIUM SILICATE FROM RICE HUSK

Sodium Silicate is a colourless compound of oxides of sodium and silica. Sodium silicate is the generic name for a series of compounds derived from soluble sodium silicate glasses. They are water solutions of sodium oxide and silicon dioxide combined in various ratios. [Read more](#)





➤ **STRAW BOARD AND MILL BOARD FROM RICE HUSK AND BAGASSE**

Mill and straw boards are thicker, heavier and less flexible than the convention paper. The thickness of board is the thickness of a single sheet board measured under specified conditions. It is usually expressed in micrometers. [Read more](#)



➤ **ACTIVATED CARBON FROM RICE HUSK, SAW DUST & COCONUT SHELL**

Carbon is probably the most widely distributed element in nature. Activated carbon from rice husk has been developed & finding wider uses. There is considerable scope in India for the manufacture of activated carbon from rice husk. The major use put by activated carbon is solution purification, [Read more](#)





➤ PAPER FROM WASTE PAPER, BAMBOO CHIPS, RICE HUSK & WHEAT HUSK

Paper being one of the basic needs of life, it occupies an important position in the world. Paper made from rice and wheat husk is widely used for manufacture of corrugated board. It is used for packing and wrapping and in the manufacture of gummed paper tap. It is also used in wrapping of magazines and journals. [Read more](#)





➤ **FUEL BRIQUETTES FROM BIOMASS (BIO COAL BRIQUETTES FROM AGRICULTURAL CELLULOSIC WASTE)**

Energy is the key factor in economic development of country. As we approach the turn of century our requirements of energy will increase rapidly and vastly. Though there are several alternative conventional as well as non-conventional energy sources have been developed, [Read more](#)





Tags

Projects on Rice Husk, Rice Hull, Rice Husk Ash, Production of Rice Husk Ash, Manufacturing of Rice Husk Ash, Production of Rice Husk, Rice Husk Ash Processing Plant, Rice Husk Ash Production Process, Rice Hull Production, How to Manufacture Rice Husk Based Products, Make Products from Waste Rice Husk, Make Money from Rice Husk Ash, Earn Profits from Rice Husk Ash, Making of Rice Husk Based Products, Forming Products from Rice Husk, Rice Husk Products, How to Earn Money from Rice Husk Ash, Profitable Project Investment Opportunity in Extraction of Ultrapure Silicon from Rice Husk Ash, Value Added Products from Rice Husk or Rice Hull Ash, Charcoal Production from Rice Husks, Investment Opportunities in Precipitated Silica from Rice Husk Ash, Production of Precipitated Silica from Rice Husk, Precipitated Silica from Rice Husk Project Report, Extraction of Ultra-Pure Silicon from Rice Husk, Particle Board from Rice Husk, Production of Particle Board from Rice Husk, How to make cement from rice husk, Project Report on Cement from Rice Husk, Production of Silicon from Rice Husk, Particle Board Manufacturing Process, Extraction of Silica from Rice Husk, Manufacture of Sodium Silicate from Rice Husk, Straw Board and Mill Board from Rice Husk and Bagasse, Production of Activated Carbon from Rice Husk, Saw Dust & Coconut Shell,



Manufacturing of Paper from Waste Paper, Bamboo Chips, Rice Husk & Wheat Husk, Fuel Briquettes from Biomass (Bio Coal Briquettes from Agricultural Cellulosic Waste), Projects on Small Scale Industries, Small scale industries projects ideas, Project profile on small scale industries, Extraction of Ultra-Pure Silicon from Rice Husk Projects, New project profile on Cement from Rice Husk, Project Report on Cement from Rice Husk, Detailed Project Report on Extraction of Silica from Rice Husk, Project Report on Extraction of Ultra-Pure Silicon from Rice Husk, Pre-Investment Feasibility Study on Extraction of Ultra-Pure Silicon from Rice Husk, Techno-Economic feasibility study on Extraction of Ultra-Pure Silicon from Rice Husk, Feasibility report on Extraction of Silica from Rice Husk, Free Project Profile on Production of Activated Carbon from Rice Husk, Project profile on Production of Activated Carbon from Rice Husk, Download free project profile on Production of Activated Carbon from Rice Husk, Industrial Project Report, Startup Project for Extraction of Silica from Rice Husk, Startup Project, Startup ideas, Project for startups, Startup project plan, Business start-up, Business Plan for a Startup Business, Great Opportunity for Startup, Small Start-up Business Project, Project report for bank loan, Project report for bank finance, Project report format for bank loan in excel, Excel Format of Project Report and CMA Data, Project Report Bank Loan Excel, List of Profitable Business Ideas in Production of Rice Husk based Projects, Products from Rice Husk, Waste to Wealth - Potential of Rice Husk



For more Projects and further details, visit at:

<https://goo.gl/YnuD41>

<https://goo.gl/DKdYwZ>

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Major Queries/Questions Answered in Our Report?

- 1. How has the industry performed so far and how will it perform in the coming years?**
- 2. What is the Project Feasibility of the Plant?**
- 3. What are the requirements of Working Capital for setting up the plant?**
- 4. What is the structure of the industry and who are the key/major players?**



- 5. What is the total project cost for setting up the plant?**
- 6. What are the operating costs for setting up the plant?**
- 7. What are the machinery and equipment requirements for setting up the plant?**
- 8. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up the plant?**
- 9. What are the requirements of raw material for setting up the plant?**



- 10. Who are the Suppliers and Manufacturers of Raw materials for setting up the plant?**
- 11. What is the Manufacturing Process of the plant?**
- 12. What is the total size of land required for setting up the plant?**
- 13. What will be the income and expenditures for the plant?**
- 14. What are the Projected Balance Sheets of the plant?**



- 15. What are the requirement of utilities and overheads for setting up the plant?**
- 16. What is the Built up Area Requirement and cost for setting up the plant?**
- 17. What are the Personnel (Manpower) Requirements for setting up the plant?**
- 18. What are Statistics of Import & Export for the Industry?**
- 19. What is the time required to break-even?**



- 20. What is the Break-Even Analysis of the plant?**
- 21. What are the Project financials of the plant?**
- 22. What are the Profitability Ratios of the plant?**
- 23. What is the Sensitivity Analysis-Price/Volume of the plant?**
- 24. What are the Projected Pay-Back Period and IRR of the plant?**
- 25. What is the Process Flow Sheet Diagram of the plant?**
- 26. What are the Market Opportunities for setting up the plant?**
- 27. What is the Market Study and Assessment for setting up the plant?**
- 28. What is the Plant Layout for setting up the plant?**



Reasons for Buying Our Report:

- **The report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product**
- **The report provides vital information on the product like it's characteristics and segmentation**
- **The report helps you market and place the product correctly by identifying the target customer group of the product**



- **The report helps you understand the viability of the project by disclosing details like machinery required, project costs and snapshot of other project financials**
- **The report provides a glimpse of government regulations applicable on the industry**
- **The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions**



Our Approach:

- **Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years.**
- **The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players**
- **We use reliable sources of information and databases. And information from such sources is processed by us and included in the report**



Free Instant Online Project Identification and Selection Service

Our Team has simplified the process for you by providing a "Free Instant Online Project Identification & Selection" search facility to identify projects based on multiple search parameters related to project costs namely: Plant & Machinery Cost, Total Capital Investment, Cost of the project, Rate of Return% (ROR) and Break Even Point % (BEP). You can sort the projects on the basis of mentioned pointers and identify a suitable project matching your investment requisites.....[Read more](#)



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NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our Market Survey cum Detailed Techno Economic Feasibility Report provides an insight of market in India. The report assesses the market sizing and growth of the Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.



And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:

- **Good Present/Future Demand**
- **Export-Import Market Potential**
- **Raw Material & Manpower Availability**
- **Project Costs and Payback Period**

The detailed project report covers all aspect of business, from analyzing the market, confirming availability of various necessities such as Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue, Plant Economics, Production Schedule,



Working Capital Requirement, uses and applications, Plant Layout, Project Financials, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis. The DPR (Detailed Project Report) is formulated by highly accomplished and experienced consultants and the market research and analysis are supported by a panel of experts and digitalized data bank.

We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in India along with its business prospects.....[Read more](#)



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- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*



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- *Entrepreneur India (An Industrial Monthly Journal)*



How are We Different ?

- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*



Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation



Contact us

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