



Dear aspirants, following are the links of various articles taken from various newspapers. Click the link to read further. To get notification, follow the blog. Thank you

1. [Grid stability is key](#)

The ambitious plan to help farmers earn from solar power generation hinges on small details.

KUSUM- Kisan Urja Suraksha evam Utthan Maha Abhiyan



To promote solar farming by decentralized solar power production a new scheme was introduced in the union budget 2018-19. Some of the key points related to the scheme are

- Name of the scheme-KUSUM
- KUSUM- Kisan Urja Suraksha evam Utthan Maha Abhiyan
- Announced in-Union Budget 2018-19
- Time period of the scheme- 10 years
- Expenditure- Rs. 1.4 trillion

Aim of the Scheme:

- To incentivize farmers to run solar farm water pumps and also use their barren land for generating solar power.
- To improve farmers income and reduce dependence on diesel pumps through solar farming.



- Ministry of New and Renewable Energy will start implementing this scheme from the next fiscal year to promote solar farming among farmers.

Components of the scheme:

These schemes have four components.

- First is to utilize the Barren land by farmers. Government is planning to build 10,000 MW solar plants on barren lands
- Second component includes installation of 17.5 lakh off grid solar farm pumps.
- Third component is grid-connected farm pumps would be solarised. Under this solarising' existing pumps of 7250 MW as well as government tube wells with a capacity of 8250 MW
- Fourth component is distributing 17.5 lakh solar pumps.

Under this scheme an option will be given to farmers to sell additional power to the grid through solar power projects set up on their barren lands.

Expenditure of the Scheme:

- The total central financial assistance under scheme would be for a period of 10 years would be Rs 48,000 crore.
- Under this scheme 60% subsidy is provided by the government. (30% from central government and 30% from state government)
- Another 30% will be met through loans while 10% of the cost will be borne by the farmer.

Positive outcomes of the scheme:

- Positive outcomes that are expected when the scheme is fully implemented across the country include
- Promotion of decentralized solar power production,
- Reduction of transmission losses
- Providing support to the financial health of DISCOMs by reducing the subsidy burden to the agriculture sector.
- The scheme would also promote energy efficiency and water conservation and provide water security to farmers.

2. [Canary in coal mine](#)

Opening up the coal sector to private players is a timely reform.

Coal is the most important and abundant fossil fuel in India. It accounts for 55% of the country's energy need. The country's industrial heritage was built upon indigenous coal.



Commercial primary energy consumption in India has grown by about 700% in the last four decades. The current per capita commercial primary energy consumption in India is about 350 kgoe/year which is well below that of developed countries. Driven by the rising population, expanding economy and a quest for improved quality of life, energy usage in India is expected to rise. Considering the limited reserve potentiality of petroleum & natural gas, eco-conservation restriction on hydel project and geo-political perception of nuclear power, coal will continue to occupy centre-stage of India 's energy scenario.

Indian coal offers a unique ecofriendly fuel source to domestic energy market for the next century and beyond. Hard coal deposit spread over 27 major coalfields, are mainly confined to eastern and south central parts of the the country.(See Coal Reserves).The lignite reserves stand at a level around 36 billion tonnes, of which 90 % occur in the southern State of Tamil Nadu.

Issues with coal production in India?

1. Government has a monopoly in coal sector with Coal India limited playing decision maker. Coal blocks are awarded to companies only for capital mining, (meaning-use for only them self). Thus the general PSU laid back effect is felt on everything from decision making to production. (Now reform has been taken in this issue)
2. Import of coal from Indonesia was cheaper option compared to mechanization and gradual re-sizeing of 1,00,000 Cr company with 4,00,000 employees and 5 labor unions. Now this has proved otherwise as Indonesian government has raised export duty.
3. Requirement of skilled workforce is a major issue. We have less than 10 engineering colleges providing Mining as a subject. Now this is for the managerial post. What about those down the pyramid ?
4. Dependence on import of machinery. Most of the underground mines need specialized mining machinery, which mining companies imports from Canada, Australia and other countries specialized in mining. These machines are not suited for Indian conditions- moisture, roughness of coal and so on. Breakdowns are high and spares need to be airlifted. This along with availability of a machine operator makes proper functioning of machinery a question, leave alone the efficiency.



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5. Naxals, Forest Flora & Funa and other elements have successfully managed to acquire land prior to mining companies and thus they own majority of mineral wealth India (Chhattisgarh, Jharkhand, Odisha).

6. Though we are not lagging behind in production when compared the opencast coal mines, (a single mine in Korba produces 1 million tonnes a day with super huge / modern machinery and employs very less manpower), converting underground mines to open cast (surface mines) require acquisition of land, which is a distant reality thanks to Land Acquisition Rehabilitation and Resettlement bill.

7. The technology we use for underground coal production is conventional drill and blast, which is about 200yrs old, again credit to 'PSU' factor for being responsible in providing employment and not production. Though we do use new and advanced methods like 'continuous miner' and 'long wall mining', the machinery factor i mentioned above takes a toll.

3. [Unwanted: 21 million girls](#)

The number spotlights how preference for male children in India is affecting the health and well-being of its women.

“Missing women” are the girls and women who would be alive today if parents were not aborting female foetuses. Girls getting less food and healthcare add to this count by raising female mortality. Amartya Sen woke us up to this problem in 1990 with an article titled “More Than 100 Million Women Are Missing”. He counted the missing women across several countries such as India, China and Pakistan. Many people knew the problem existed, but Sen’s number, called out in the title of his article, made the problem salient.

“Unwanted girls” are girls who are alive but likely disfavoured by their parents. They receive less healthcare and schooling, with life-long effects on their well-being. It is not news that many parents favour boys over girls. What we lacked was a statistic that quantified the scope of the problem. Now we have it: Twenty-one million unwanted girls under the age of 25 in India. These girls are more precisely described as “less wanted” children.

As a result of this son meta preference, the economic survey estimates that India could have as many as 21 million “unwanted girls,” i.e., girls whose parents wanted to have sons instead.



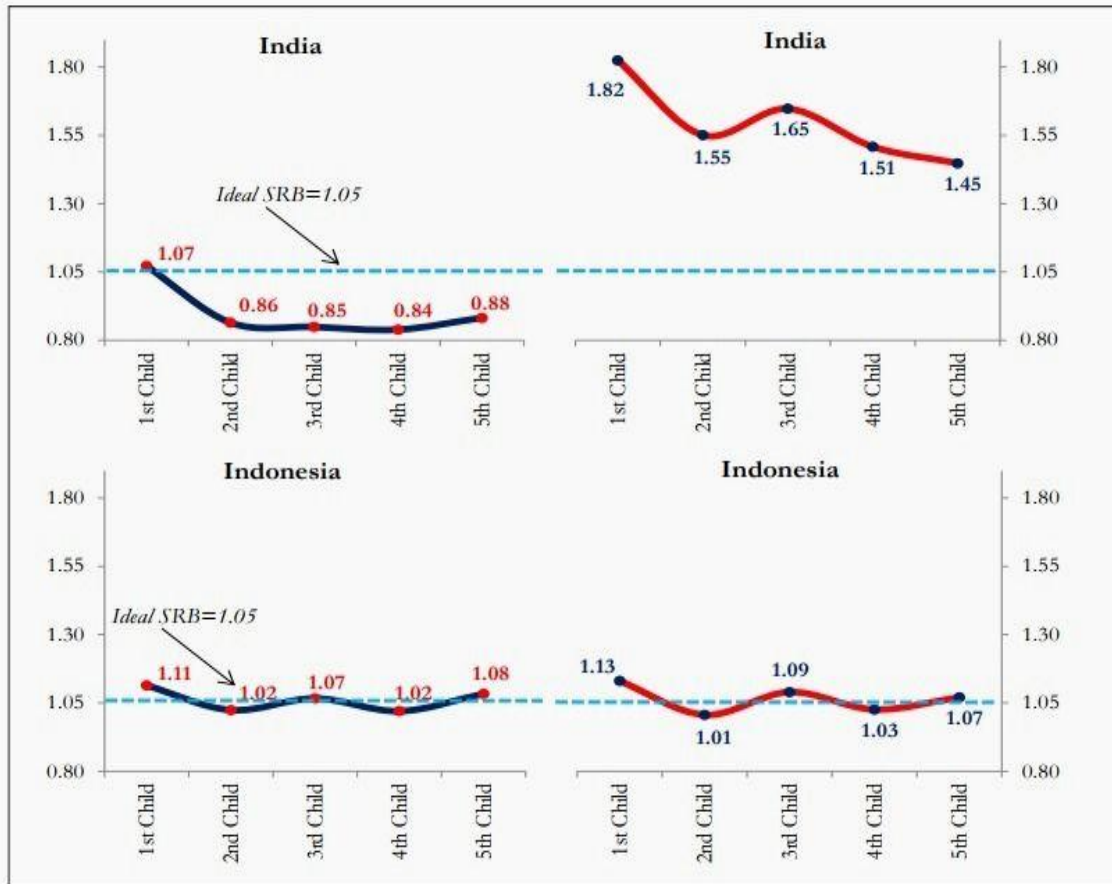
To come to this conclusion, the survey looked at an indicator called the sex ratio of the last child (SRLC), using decades of data from the demographic and health survey. This indicator is likely to be heavily skewed in favour of boys if the society has a preference for sons—unfortunately, exactly what is seen in India.

The following chart shows how, in India, the sex ratio changes with each child that is born. The panel on the left shows that the sex ratio of the first child in Indian households with more than one child is 1.07, fairly close to the biologically determined natural sex ratio.

But the sex ratio of the last child for first-borns is 1.82—heavily skewed towards boys, according to the authors of the survey. The contrast becomes clearer when India is compared to a country like Indonesia, where the SRLC is close to the ideal sex ratio, regardless of birth order and whether or not the child is the last to be born.



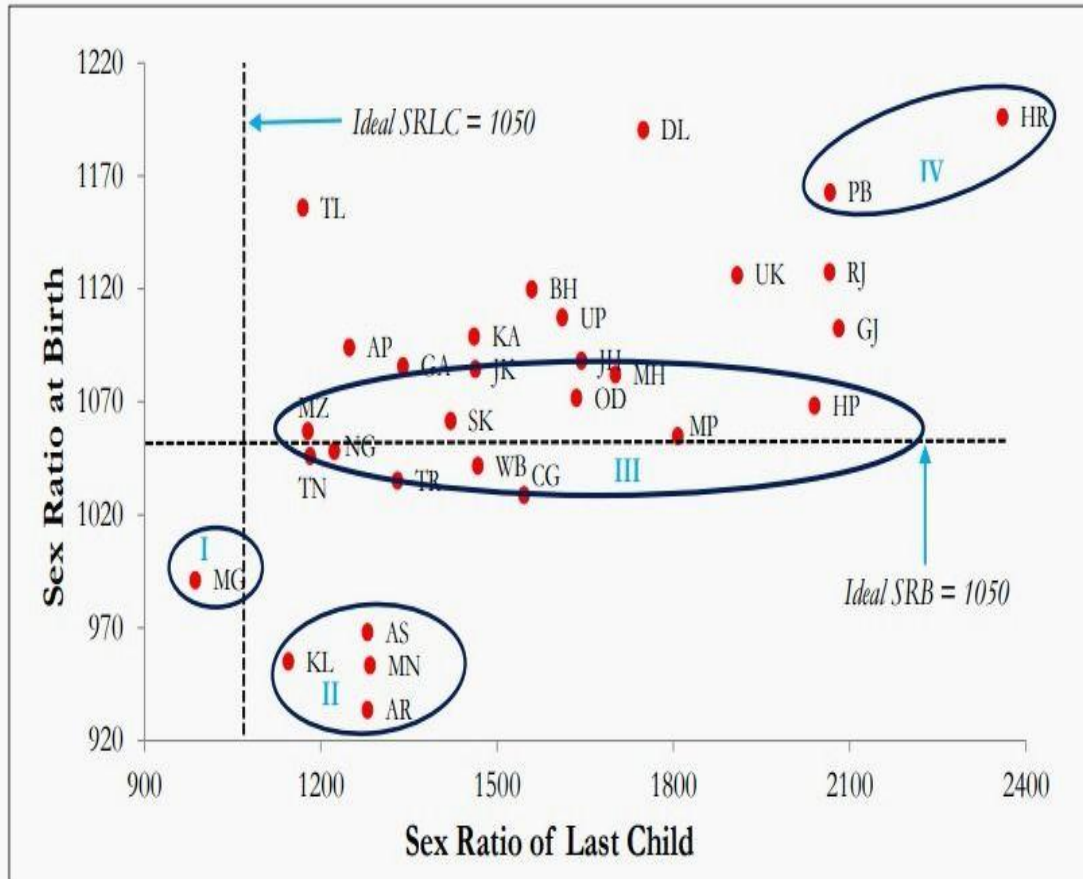
Sex Ratio by Birth when child is not the last (2015-16) Sex Ratio by Birth when child is the last (2015-16)



When the survey analysed this indicator by state, Meghalaya stood out because the sex ratio at birth and the SRLC were both close to the benchmark. But the authors also found that states that don't practice sex-selective abortions, such as Kerala, did demonstrate a son meta preference, recording a skewed SRLC. And the northern states of Punjab and Haryana showed both extremely high son preferences and son meta preferences.



Figure 7. Sex Preference – “Malign” and “Meta” (Male Per Thousand Females)



Source: Survey calculations based on NFHS 4.

“In some sense, once born, the lives of women are improving,” the survey says, “but society still appears to want fewer of them to be born.”

4. [Restructuring the public school system](#)

Composite schools should be created through vertical integration, to improve efficiency, facilities, and the curriculum

Although the Indian public school system has addressed the problem of access, it has failed to withstand competition from private schools. These failures of the public school system call for an overhaul of the structure of schooling in India, especially at a time when the new education policy (NEP) is being drafted by the Kasturirangan committee.

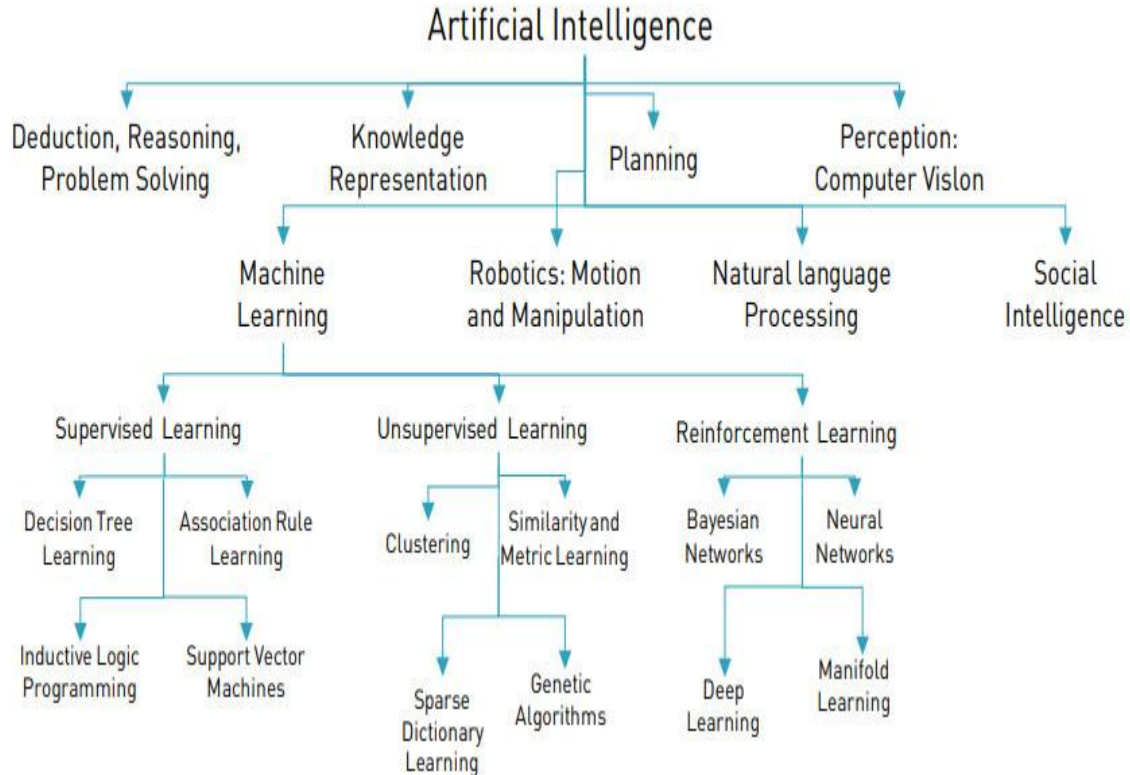


KEY PROPOSALS

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> ● Internationalization of higher education | <ul style="list-style-type: none"> ● Vocationalization of education | <ul style="list-style-type: none"> ● development |
| <ul style="list-style-type: none"> ● Public-private-partnership in higher education | <ul style="list-style-type: none"> ● Outcome-based teaching-learning model in elementary schools | <ul style="list-style-type: none"> ● Relooking at students' financial assistance schemes |
| <ul style="list-style-type: none"> ● Role of central government funded institutions to improve quality of people's lives | <ul style="list-style-type: none"> ● Technology adoption to improve access and quality of education | <ul style="list-style-type: none"> ● Revamping teacher education system |
| <ul style="list-style-type: none"> ● Improving the quality of regulation, revamping regulators | <ul style="list-style-type: none"> ● Spending 1.5% of gross domestic product on research and | <ul style="list-style-type: none"> ● Addressing regional disparities and social gaps |
| | | <ul style="list-style-type: none"> ● Value education |

Source: HRD ministry

5. [The Global Race for Artificial Intelligence: Weighing Benefits and Risks](#)



Summary of Potential Benefits of AI and Risks



Sector	Potential Benefits	Potential Risks
Governance	<p>Process Optimization & Cost Saving Decision Making & Problem Solving</p> <p>Human Resources Management</p>	<p>Lack of Technical Competence Inability to Synchronize Goals/Expectations</p> <p>Dependence on Foreign Technology</p>
Economy	<p>Next Generation of Economic Growth Spurring Innovation</p> <p>Value and Job Creation</p>	<p>Economic Competition & Espionage Threats to Intellectual Property</p> <p>Loss of Conventional Jobs</p>
Automotive Industry	<p>Self-driving Cars Enhanced fuel efficiency</p> <p>Enhances Safety Features</p> <p>Optimize Logistics & Supply Chain</p>	<p>Regulatory Challenges Overdependence on Technology</p> <p>Software Error, Defect or Failure</p> <p>Susceptible to Hacking/Interference</p>
Defence & Security	<p>Decision Making (Tactical & Strategic) Trainings and War-gaming</p> <p>Logistics, Fleet Management</p> <p>Periodic Maintenance</p> <p>Intelligence Analysis</p> <p>Face Recognition & Crime</p>	<p>Ethical & Legal Concerns from LAWS Dependence on Foreign Technology</p> <p>Human Safety & Security</p> <p>Software Error, Defect or Failure</p> <p>Potential Weapons Arms Race</p>



	Prevention	
Foreign Policy	<p>Decision Making Scenario Analysis</p> <p>Analysis of Historical Data/Events</p> <p>Negotiations</p> <p>Information Analysis</p> <p>Public Diplomacy</p>	<p>Lack of Cognitive Data for Deep Learning Multilateral Rules of the Road</p> <p>Technology Acceptance in Decision Making</p> <p>Lack of Data from Other Countries</p> <p>Dependence on Foreign Technology</p> <p>Potential Weapons Arms Race</p>
Healthcare	<p>Drug Discovery and Safety Diagnosis and Lab Results Analysis</p> <p>Preventive Care</p> <p>Insurance Risk Assessment</p>	<p>Training Doctors and Paramedical Staff Generating Awareness</p> <p>Acceptance of AI in Medical Practices</p> <p>Technology Affordability</p>