



Contact: 097418 69722

22 September 2018**Daily News Pedia****Satellite control set to give drones more sting**

India is planning to upgrade its drone operations, from existing ground control stations to satellite control of military unmanned aerial vehicles (UAVs), to boost its range, endurance and flexibility.

This significant capability boost will come with the launch of GSAT 7A. Because GSAT 7A is an advanced military communications satellite built by ISRO. It is specially geared for RPA (remotely-piloted aircraft) or drone operations. It will be country's second dedicated military satellite after *GSAT-7* or '*Rukmini*' which was launched for the Navy in 2013.

Benefits of GSAT 7A: Indian armed forces as of now control their Israeli-origin surveillance drones like the Heron and Searcher-II UAVs through a network of ground and ship-based stations, which limits their operations to 'radio line of sight'.

Radio line of sight: It is a type of propagation that can transmit and receive data only where transmit and receive stations are in view of each other without any sort of an obstacle between them. FM radio, microwave and satellite transmission are examples of line-of-sight. With the GSAT-7A up in space in geosynchronous orbit, IAF will be able to hugely extend the reach, flexibility and endurance of its UAVs for beyond line of sight missions. The footprint of the satellite with steerable beams will cover India and its extended neighbourhood.

Source: The Hindu.

ISRO set to have new launch pad

The ISRO is setting up a third launch pad at Sriharikota to undertake the Gaganyaan manned space flight programme, an ISRO official said on Friday. In addition, ISRO is scouting for a location on the western sea coast near Gujarat to set up another launch pad for Small Satellite Launch Vehicles (SSLV). ISRO presently has two launch pads, which are already full. A third launch pad is being set up for the human space flight. ISRO will use its GSLV Mk-III launch vehicle, which can carry the heavier payload of the Gaganyaan, and this will take off from the new launch pad. In addition to the third launch pad at Sriharikota, ISRO is also scouting for a new location near Gujarat for the SSLV.

Small Satellite Launch Vehicles (SSLV): ISRO is developing the SSLV to offer affordable launch options for smaller satellites through Antrix, the space agency's commercial arm. ISRO currently piggybacks smaller satellites on the PSLV and GSLV along with bigger satellites. The SSLV is expected to reduce the launch time as well as cost less to launch small satellites, which are much in demand. ISRO have evaluated several locations of which the first two SSLV launches will take place from Sriharikota. After that they will move to the new location.

Currently smaller satellites are being launched by ISRO on the PSLV (Polar Satellite Launch Vehicle) and GSLV ISRO is ready to transfer the entire SSLV to private industry.

Source: The Hindu.

Exercise Avaiindra-18

It is an Air Force level exercise between India and Russia.

First Avaiindra was conducted in 2014 as a bi-annual exercise. Avaiindra 18 was held in Lipetsk, Russia from September 17 to 28, 2018. The second session of Avaiindra 18 will be conducted in Jodhpur, Rajasthan from December 10 Dec to 22, 2018.

Source: The Hindu.

Third-party verification for Environmental Clearance

The MoEFCC proposes to allow research organisations and accredited agencies to monitor if companies are complying with environmental conditions. It proposes to introduce the concept of randomized third-party compliance monitoring of the environment clearance conditions. This will be carried out through national-level reputed and competent government institutions to be empanelled by the MoEFCC.

India's environmental laws require project developers to submit themselves to the Environment Impact Assessment (EIA): Under this an independent agency, commissioned by the project developer, ascertains the likely environmental impact of a proposed project. The preparation of an EIA report and an environment management plan ensures that the adverse environmental impact of projects and activities are assessed and studied. Accordingly mitigation measures are taken in the implementation of the project to avoid or minimize the adverse environmental impact.

Environment Impact Assessment (EIA): Environmental Impact Assessment (EIA) is an important management tool for ensuring optimal use of natural resources for sustainable development. EIA has now been made mandatory under the Environmental (Protection) Act, 1986 for 29 categories of developmental activities involving investments of Rs. 50 crores and above.

With a view to ensure multi-disciplinary input required for environmental appraisal of development projects, Expert Committees have been constituted for the following sectors: Mining Projects, Industrial Projects, Thermal Power Projects, River Valley, Multipurpose, Irrigation and H.E. Projects, Infrastructure Development and Miscellaneous Projects, Nuclear Power Projects.

Source: The Hindu.

Ban on adoption by live-in partners lifted

Individuals in a live-in relationship will once again be able to adopt children from and within India after the country's nodal adoption agency decided to withdraw a circular issued earlier this year disallowing them from doing so.

The Child Adoption Regulatory Authority (CARA), in an earlier circular, barred applicants in a live-in relationship from adopting a child on the ground that "the Authority would like the children to be placed only with a stable family and individuals in a live-in relationship cannot be considered as stable family."

It has now decided to withdraw the circular and applications from prospective adoptive parents will be examined on a case-by-case basis.

The decision will benefit both domestic and international applicants.

Eligibility criteria for adoption:

The eligibility criteria under Adoption Regulations, 2017, permit single women to adopt a child of any gender, while single men can adopt only boys.

When a married couple seeks to adopt a child, it needs to give its consent for adoption and should be stable marriage for at least two years.

Applicants have to be physically, mentally and financially stable to raise a child.

Source: The Hindu.

EDITORIAL

To read

Pro-women, pro-poor

India may have just witnessed the best four years of inclusive growth, thanks to the Centre's sanitation programme

India's performance in poverty reduction since the early 1990s has been remarkable. A constant criticism has been that while the decline in consumption poverty has been large, the improvement in social indicators like education and mortality has not been as commendable. Absolute poverty declined from 46 per cent in 1993/94 to only 13 per cent in 2011/12 (Tendulkar poverty line of Rs 30 per capita per month in 2011/12 prices and/or World Bank international poverty line of \$1.90 PPP dollars per person per day).

This lack of comparable change in socio-economic indicators has been a consistent phenomenon, and all governments in India have been criticised for this failure. Socio-economic data has shown that improvement in indicators for women was not as good as that for men. Hence, while much had been achieved, gender equality was still lagging in India. One of the signature reforms of Prime Minister **Narendra Modi**, announced from the ramparts of the Red Fort on August 15, 2014, was the Swachh Bharat Abhiyan. The major component of this programme was to make India OD (open defecation) free by October 2019, the 150th birth anniversary of **Mahatma Gandhi**, the original proponent of an OD free India. Unfortunately, our reformers forgot his message as they proceeded to make India modern and prosperous but attempted to do so without improvements in sanitation.

The PM boldly stated that open defecation was a major blot on India's progress, and a major drawback for gender equality in education and safety. Simultaneously, PM Modi announced the Beti Bachao, Beti Padhao (save the daughter, educate the daughter) initiative (aka reform).

INDIA'S PERFORMANCE IN SELECT SOCIO-ECONOMIC INDICATORS 1990-2017				
INDICATOR: UNDER-5 MORTALITY LEVELS (PER 1,000 LIVE BIRTHS)				
Year	Male	Female	Male-Female Gap	Sex Ratio
1990	122.0	130.3	8.3	106.4
2000	87.0	96.6	9.6	111.1
2010	55.6	61.4	5.8	109.9
2015	42.8	45.5	2.7	106.4
2017	38.5	40.4	1.9	105.3
INDICATOR: ANNUAL (LOG) PERCENTAGE CHANGE IN UNDER-5 MORTALITY				
1990	-	-	-	-
2000	-6.8	-6.0	0.8	0.9
2010	-9.0	-9.1	-0.1	-0.2
2015	-5.2	-6.0	-0.8	-0.6
2017	-5.3	-5.9	-0.6	-0.5
INDIA'S RANK GLOBALLY				
1990	-	-	-	-
2000	35	42	69	70
2010	36	38	57	46
2015	20	15	5	6
2017	8	7	1	2



Source: UNICEF, 2018. Data available at UN Population Division ([link](http://www.un.org/en/development/desa/population/publications/mortality/child-mortality-report-2018.shtml)). Note: 1. Sex Ratio is defined as the number of males per 100 females. 2. Y-o-y changes are annualised. 3. Ranks calculated for all developing countries with a population more than 5 million. 4. The gap is the female-male difference for each indicator.

Sarfaraz Alam

These announcements have to be put in perspective of what was expected from PM Modi. Many self-styled economic reformers believed then (and believe today) that PM Modi should have

begun to privatise the economy. The fact that he didn't showed that he was not an economic reformer.

Let us first recognise the boldness of the OD initiative. First, as a surprise to all the upper classes, in India and around the world, a taboo conversation word — defecation — was openly discussed, and by the PM no less. Here we were expecting growth-enhancing reforms, and the PM was talking about defecation. That close to 50 per cent of rural India was indulging in this practice came as a shock to most. This is not what the elite, especially the upper-class elite belonging to the “poverty study” group, had even discussed in private, let alone in public. Over the last few years, there actually has been a concerted campaign to bad-mouth the toilet campaign. Newspaper stories have emerged about the “fact” that the building of toilets has been exaggerated. For many toilets that have been built, many do not have enough water. I have seen “popular” pictures of farmers’ unused bathrooms being used for storage of grain. Academic analysts warned of a quick-fix; attitudinal change was required, and this was painfully slow. When the first survey results of toilet usage were published (done by the Quality Council of India in 2016), they were criticised for biased sample selection, that is, only high-performing areas were chosen for the survey, and hence could not be relied upon as indicative of what was happening in the backward areas of India (for example, Bihar), states which were not part of the survey.

A few days ago, Finance Minister Arun Jaitley described Swachh Bharat as the most important reform initiative of the Modi government. That is some endorsement, given that Modi's BJP government has introduced a large set of economic reforms — demonetisation (reduction of black money and enhancement of direct tax revenues); the introduction and implementation of the Insolvency and Bankruptcy Code (IBC), a reform that has not been given the credit due, as yet; and GST. How accurate is Jaitley's claim that this has been a mega achievement of the Modi government? Most critics (analysts) have dismissed it as usual election year exaggeration. What are the statistics about the decline in open defecation? How can long-entrenched social attitudes change so quickly, especially when “expert” studies have shown that this is a long and arduous journey, which started barely four years ago? Government statistics do not help because they are government statistics, and hence not that credible. As an aside, the same critics readily accept a badly constructed back-series on GDP data in India. Why? Because this back-series upgraded the GDP growth rates observed in UPA-I and UPA-II. If there is another reason for the ready acceptance of the back-series by the Congress (and its cheer leaders), the nation has yet to learn.

A few days ago, the UN released data for under-five mortality rates for 180 countries for the period 1990 to 2017. Apart from safety and dignity for women, open defecation has major implications for mortality, and especially mortality rates for children. If OD free India has been even partially successful, it should show up in mortality rates for small children (under the age of five). Note that looking at the pace of mortality reduction is not a very stringent test for the success/failure of the OD program.

It is not a stringent test because mortality decline is affected by at least four other important factors — income growth, technological advances (medicine and vaccination), improvement in water supply and education of women. All of these indicators are improving in India, so one cannot attribute the reduction in under-five mortality to the reduction in OD. Possibly, OD is the most important, but how does one prove it?

The table presents data for levels, and the average rate of decline, per year, for India, 1990 to 2017. The largest annual pace of decline for female under-five mortality (as well as for males) was observed during the 10-year period 1990 to 2000. Most socio-economic indicators, unlike income indicators, cannot be analysed in simple rates of change. This is because many socio-economic indicators have floors and ceilings, for example, life-expectancy, education, mortality. The under-five female mortality rate has shown virtually no improvement for Sweden between

2010 and 2017 — a decline from the rate of 2.8 (per 100,000) in 2010 to 2.6 in 2017. This is only a decline of (log) 7.4 per cent, compared to over a 40 per cent decline for India. Given this caution about floors and ceilings, how does one evaluate India's performance? The first goal is to compare like with like, that is, compare India to its peers, loosely defined as emerging economies (aka developing countries) with a population greater than five million. Second, to compute ranks of performance with rank equal to 1 for the country with the fastest rate of decline.

Data for India are presented in the table and the reader can, at leisure, interpret the levels and changes. I want to concentrate on India's rank (among 76 countries) in 2017. India achieves the rank of seven for female under-five mortality, a large improvement over the 15 rank just two years earlier!

Yet another performance indicator is the pace of improvement in female mortality relative to that of males (the difference in the rates of change). For this indicator, India is the best performing country in the emerging world. Finally, the male/female sex-ratio indicator (how many bet have been saved?), rank for India is number 2. This improvement will be assessed in detail in another article.

One must give credit where credit is due. Academics said such a fast rate of change was not possible. Well-known bureaucratic inertia in India meant that even if theoretically (academically) possible, implementation of the OD campaign would face insurmountable hurdles. Add to it the so-called caste factor preventing success. Why did the programme succeed beyond all calculations? Because it was a pro-poor, pro-female, campaign. Because it improved the safety and dignity of women. Because it was (shockingly!) very well administered. And because it was a high-profile PM campaign.

MAINS QUESTION

Q: Do you think planning in India still relevant today? Critically analyse the role and functioning of NITI Ayog.