

Make Your Career Soar High with Air Sports

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India aspires to become one of the top nations hosting air sports by the year 2030, as envisioned in the National Air Sports Policy 2022 (NASP) unveiled in June this year. The policy aims to create an ecosystem conducive for safe, affordable, accessible, enjoyable and sustainable air sports leisure pursuits and competitions in India. Launching the policy, Union Minister for Civil Aviation, Shri Jyotiraditya Scindia, said, "From a small market size of around 5,000 odd air sports practitioners creating around Rs 80-100 crore of annual revenue in India, I feel we can target over Rs 8,000 - Rs 10,000 crore annual revenue and generate over 1,00,000 direct jobs. The economic multiplier benefits in terms of travel, tourism, support services and local infrastructure development will be over three times."

Though activities like paragliding and hot air ballooning are already operational in different



parts of India, the NASP explicitly spells out the following sporting and adventure activities that will be promoted and regulated (to be revised as and when required).

- Aerobatics
- Aero-modelling and model rocketry
- Amateur-built and experimental aircraft
- Ballooning
- Drones
- Gliding and powered gliding
- Hang gliding and powered hang gliding

- Parachuting (including skydiving, BASE1 jumping and wingsuits etc.)
- Paragliding and paramotoring (including powered parachute trikes etc.)
- Powered aircraft (including ultralight, microlight and light sports aircraft etc.); and
- Rotorcraft (including autogyro).

Scope of Air Sports in India

Air sports are particularly popular in Europe followed by North America and Australia. During peak winters, the level of air sports activity reduces in Europe and enthusiasts move to other countries. India has a large geographical expanse, diverse topography, fair-weather conditions, large population of employable youth, topped with a growing culture for adventure sports and aviation. Therefore, India can bank upon the opportunity to host the migratory air sports professionals, many of whom are high-spending tourists too. The ASFI (Air Sports Federation of India) and the regional air sports associations have been tasked with developing a hassle-free process to enable the movement to air

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sports professionals and enthusiasts to India. This will enable Indian air sports enthusiasts and governing bodies to learn from the experience of the visiting professionals, get exposed to global best practices, thereby learning ways and means to create opportunities of hosting recreational adventure activities as well as global competitions in India.

Entrepreneurial Opportunities

Air Sports Equipment Market: According to Technavio's "Air Sports Equipment Market by Product, Application, and Geography - Forecast and Analysis 2021-2025", the market will grow by US\$ 842.57 Million at a CAGR (compound annual growth rate) of 6.39% during the forecast period. The report is segmented by product (paraglider, canopy, and reserve parachute, container and harness, protective gear, and others), application (skydiving, paragliding, BASE jumping, and bungee jumping), and geography (Europe, APAC, North America, South America, and Middle East and African countries). Technavio is a leading global technology research and advisory company.

Technological innovations in the product portfolio are one of the major factors that attract customers and increase sales. Vendors in the market are constantly improving their air sports equipment to make trips more safe, secure, and comfortable. Technological innovations are based on several factors such as fabric design, system engineering, mechanical design, control systems, and rigging and packing.

The key stakeholders in the air sports equipment market include the • Raw material traders/suppliers/distributors • Equipment manufacturers • Equipment distributors/traders/wholesalers/suppliers/retailers • Regulatory bodies • Commercial research and development (R&D) institutions • Importers and exporters • Government organizations, research organizations, and consulting firms • Trade associations and industry bodies • End-use industries.

In the NAPS 2022, the Government of India has specified that support will be provided for boosting innovation, research and entrepreneurship in air sports via targeted programs. The Government has made it clear that it may consider allowing import of air sports equipment (new and previously used) with reduced import duty for a particular number of years, subject to laid down norms for airworthiness, while pushing for local manufacturing. For this, the Government plans to offer Production-Linked Incentive (PLI) for domestic manufacturing of air sports equipment under the Atmanirbhar Bharat Abhiyan. Complex equipment for air sports include aircraft, specialised parachutes, helmets, batteries, GPS trackers and radio aids etc. which are

currently being imported. Moreover, airports, by their very nature, involve a higher level of risk than other regular sports. This provides a ground for new aviation technologies and safety procedures. Therefore, the popularity of air sports in India will open up huge opportunities for the design, manufacturing and retail and maintenance of sporting equipments as well as safety equipments. Not only this, it will also provide opportunities for entrepreneurs to engage in the business of training of personnel for operating and maintaining such equipments.

Air Sports Tourism Business: With the ongoing thrust on promoting India as a hub for adventure sports including air sports, investors are eager to put in their money on adventure tourism firms, holiday resorts, leisure camps, excursion agencies, adventure sports agencies, commercial recreation centers, sports centers, athletic clubs, adventure training institutions, and travel channels and blogs. As tourism businesses centred on air sports are not overly congested, they make for novel and unique business propositions. Such businesses will not only ensure handsome profit for investors and business owners, but will also generate a plethora of employment opportunities for the workforce.

Rewarding Job Profiles in Air Sports Sector

- **Aerobatics Pilot:** Aerobatics are skilful displays of flying aircraft, usually to entertain people watching from the ground. Aerobatics Pilots need a set of skills, qualifications and talent, far exceeding those required of a regular pilot. An Aerobatic Pilot needs to explore the limits of the airplane under challenging, often adverse, weather conditions by applying highly specialized technically supported precision flying strategies in a custom created stunt airplane.
- **Aeromodelling and Model Rocketry:** Aeromodelling and model rocketry are the art of designing, building and flying miniaturized aircrafts and rockets (powered or non-powered). It is both a hobby and sport; the hobby aspect involves building and assembling model aircraft, and the sport part involves the flying. Enthusiasts can participate in various national and international aeromodelling and model rocketry competitions and win recognition and prizes. Miniature aircraft and rockets are also a hit among collectors; hence designing and building such aircraft for exhibitions, sales etc, can be a bright career option. After gaining a certain degree of expertise, one can also opt for operating an institute offering courses and training in aeromodelling and model rocketry.

- **Amateur-built and experimental aircraft maker:** A career centered on the construction and operation of amateur and home built aircraft, and the restoration of vintage aircraft is also a lucrative one.
- **Hot Air Balloon Pilot:** Hot air ballooning is a hit among excited tourists as well as eager advertisers. The one thing that every hot air balloon needs is a skilled and certified hot air balloon pilot. Hot air balloon pilots are specially trained for conducting balloon flights and need to have knowledge of meteorology, airmanship, navigation, flight rules, codes of conduct, pre and post flight procedures, airport operations, balloon maneuvers, emergency procedures, and regulations.
- **Drone Racer:** Drone sports, or FPV (First Person View), is the only sport that combines the virtual world with physical reality. Where the rider controls the plane wirelessly, using virtual reality glasses to see the plane's perspective as if he is controlling from inside the plane, with the basic information of flight emerging from the plane and battery settings. And the rider uses this information to achieve the best flying style. FPV competitions are gaining popularity worldwide with teams hiring people trained in wireless flying skills.
- **Glider Pilots:** Gliding is a technical sport and to become proficient, you will need to build a wealth of knowledge on topics like soaring techniques and meteorology. You will also need to be familiar with the theory and essentials of flight, safety, navigation and regulations in order to become a licensed glider pilot. The aerodynamics are especially important since your proficiency as a glider pilot rests on your ability to maximize your time in the sky by skillfully applying knowledge of aerodynamic principles.
- **Hang Gliding Pilots/Trainers:** Hang gliders are controlled by shifting the pilot's weight with respect to the glider. Pilots are suspended from a strap connected to the glider's frame (hence the name "hang" glider). By moving forward and backward and side to side at the end of this strap, the pilot alters the center of gravity of the glider. This then causes the glider to pitch or roll in the direction of the pilot's motion and thus allows both speed control and turning. One has to learn rigging the glider, pre flight inspection, ground handling, launching and landing skills, in order to become a hang glider pilot. With these skills, one can also become a hang glider instructor for training those seeking to fly solo.
- **Sky Diving Instructor/Jumpmaster/AFF Instructor:** Skydiving or parachuting is of various types - Tandem, Static Line, Instructor-

Assisted Deployment (IAD), and Accelerated Freefall (AFF). In Tandem skydiving, a client or student skydiver is connected to an instructor via a harness. The instructor guides the student through the whole jump from exit through freefall, piloting the canopy, and landing. In Static Line, IAD, the instructor does not accompany the student but their role is nonetheless important. In most AFF programs, two instructors jump with the student during their first three AFF jumps, although some programs may use only one instructor. On the initial levels, the instructor(s) hold on to the student until the student deploys their own parachute. Hence, this method is classified as harness hold training. The AFF instructors have no physical connection to the student other than their grip on the student, so once the student's parachute is deployed the instructors fly away and deploy their own canopies. Students are dependent on their AFF instructor while gaining control and altitude awareness while in freefall. AFF instructors must assist students as they learn new maneuvers, (i.e. pull sequence, stable freefall, turns, forward motion, track, instability drills, etc.). Candidates interested in becoming AFF instructor should have a solid control of their own freefall skills and awareness and will be tested on both flying skills and teaching abilities. In addition to freefall skills, AFF Instructors must teach tasks regarding canopy flight, gear & equipment, spotting & aircraft, in-depth emergency procedures and the extant rules & regulations.

- **Sports Pilot Trainer:** The exhilaration felt during flying an aircraft matches nothing. Therefore, recreational flying tops the list of aerosport activities. Adventure flying or recreational flying is done on ultralight, microlight and light sports aircraft. For enthusiasts, getting a private/sports pilot license is the first step towards realising the dream of flying an airplane. There are many institutes offering professional, recreational, and adventure sport pilot training and certification to aviators for a fee. Such

institutes recruit trained pilots and instructors with requisite knowledge, skill, and experience for training aviators, and certifying their ability through written, oral, and practical examinations.

- **Rotorcraft/Helicopter Flying Instructor:** Rotorcraft/Helicopter sports include the flying of the aircraft and a set of exercises in piloting accuracy at a low altitude and in a limited time. This sporting or hobby flying is permitted only after the enthusiast acquires a pilot certification for the same. Flying academies require trained aviators to teach ground training topics and flight maneuvers, ways to identify in-flight safety hazards and ways to overcome them.

Training and Education in Air Sports

While there are institutes in India that offer certification courses in paragliding, skydiving, drone pilot training etc, for more specialized training like aerobatics and AFF, the NASP envisions tying up with the armed forces. "The armed forces of India, Central Armed Police Forces (CAPF) and various state police forces have excellent training facilities, equipment and instructors for air sports. ASFI will engage with the Ministry of Defence, Ministry of Home Affairs and State police forces to explore opportunities for extending their facilities to the public on a reasonable fee basis; without compromising on quality, safety, national security and operational requirements of the forces," the policy document reads. Moreover, the NASP spells out that programs aimed at raising interest in air sports will be encouraged. Schools, colleges and universities will be encouraged to have air sports included in their curriculum. Students will be encouraged to participate in domestic and international competitions conducted periodically for children in different age categories. Support may be provided for boosting innovation, research and entrepreneurship in air sports via targeted programs.

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