

Indian Inventions

Jaipur Foot

India's Innovation That Helped Millions Walk Again



Have you ever tried hopping on one foot for even a minute? Imagine having to do it your whole life. That's the reality for many people who have lost a leg in an accident, illness or even due to war or natural disasters.

But India found a powerful, life-changing solution and it didn't cost a fortune. It's called the Jaipur Foot, one of the world's most successful scientific innovations. Created right here in India, it's not just a smart invention, it's a story of science helping real people.

What is the Jaipur Foot?

The Jaipur Foot is a prosthetic limb or artificial leg, that helps people walk, run, sit cross-legged, squat and even climb trees. Things that are a part of everyday life, especially in villages and small towns across India.

It was invented in 1968 by a team led by **Dr. Pramod Karan Sethi**, an orthopaedic doctor, and **Ram Chander Sharma**, a skilled craftsman, at the Indian Spinal Injuries Centre in Jaipur.

They didn't have fancy materials or high-tech equipment. What they had was a simple idea: create a low-cost, flexible, and durable foot for people who couldn't afford expensive prosthetics from abroad. And that's how the Jaipur Foot was born!

Why is it so special?

Unlike foreign prosthetic limbs, which often cost lakhs of rupees, the Jaipur Foot costs **just ₹3,000 to ₹5,000**. That's about the cost of a new school bag, shoes, and textbooks for a year!

But even at this low cost, it offers amazing features.

- Made from rubber, wood, and plastic, it's lightweight and works well on uneven village paths.
- It allows barefoot walking, cross-legged sitting, and squatting—very important in Indian homes, farms, and temples.
- It's easy to use and doesn't require complicated machines or power to function.

In fact, someone who loses a leg can walk into a Jaipur Foot centre in the morning and walk out by evening, walking on two legs again!



Who uses the Jaipur Foot?

Over **2 million people** in India and more than **30 countries** have benefited from this invention. Many are

- Farmers who need to bend, squat and walk through fields.
- Children who want to go back to school and play again.
- Factory workers who need to stand all day and move quickly.
- Soldiers and victims of earthquakes or accidents who lost limbs.

It's not just in India. The Jaipur Foot has helped people in Nepal, Sri Lanka, Pakistan, Africa, and even the Middle East, giving them independence and dignity.

Want to know how it works?

- It uses simple engineering design with joints and materials that copy the movement of a real foot.
- It's designed to work on mud, gravel, and stairs, not just on smooth hospital floors.
- The ankle joint gives flexibility to walk, turn and even run!

Think of it like building a robotic leg with recycled parts, but made for real-life challenges.

Meet the Heroes Behind the Mission

The Jaipur Foot is provided by an organisation called BMVSS (Bhagwan Mahaveer Viklang Sahayata Samiti). It was started in 1975 in Jaipur by D.R. Mehta, and is now the world's largest organisation for free artificial limbs.

They run camps in villages, set up mobile vans for remote areas, and even travel to other countries. And it's all free for those who need it.

Riddles 2504

1. Thirty white horses on a red hill, First they champ, Then they stamp, Then they stand still.
2. What are ten things you can always count on?
3. What do dogs have that no other animal has?
4. Anyone can hold me, even without their hands, yet no one can do it for long. What am I?

Solutions are on Inside Back Cover.

What can YOU learn from the Jaipur Foot?

If you're in school and love science, this is more than a story—it's an inspiration.

- Think like a problem-solver. Can you design something useful from simple materials?
- Combine biology and engineering like how joints and bones work.
- Don't just invent for marks; invent for people.

Maybe you could build a walking aid, a water-saving device, or even a smart school bag! The world needs your ideas.

By the end, you might come up with an Indian invention with a global heart.

The Jaipur Foot proves that great science doesn't need great money, just great minds and big hearts. It shows how an idea born in a small Indian workshop can change the lives of millions around the world.

So next time you open your science book, think beyond the pages. Ask: Can my ideas solve a real problem? Because if a doctor and a craftsman in Jaipur could change the world, maybe the next inventor... is YOU.

Do you Know?

On the Moon, you'd feel like a superhero weighing just 10 kg instead of 60!

Your brain can store more info than a supercomputer.

The space is completely silent because sound cannot travel in a vacuum.

Your brain uses about 20% of your body's total energy, even when you're just thinking.