

مرحبا بكم



A.I. in EGYPT



The 10 HOWs

- Q1.How can you collect a semen sample?
- Q2.How can you evaluate a semen sample?
- Q3.How can you extend a semen sample?
- Q4.How can you preserve a semen sample?
- Q5.How can you inseminate a cow?
- Q6.How can a sperm reach the ovum in the female GT?
- Q7.How can you solve the problems of AI in Egypt?
- Q8.How can you fertilize an ovum in vitro?
- Q9.How can you transfer an embryo in a cow?
- Q10.How can you clone an animal?



Questions on A.I.

A.I. In Egypt

A magnifying glass with a silver handle and frame is positioned over a small, circular, textured object, likely a seed or a microorganism. The background is a light blue gradient. The text is overlaid on this image.

Explain why there is a wide commulative scientific gap (CSG) between Egypt and European countries in Artificial insemination technology?

CSG in A.I.

It means that there was a wide difference between Egypt and European countries in the application of A.I. technology. This arised due to the missing tools in the construction of A.I. system. This includes the preparing of :
centers, specialists, infrastructure
and the absence of **A.I. strategy**.

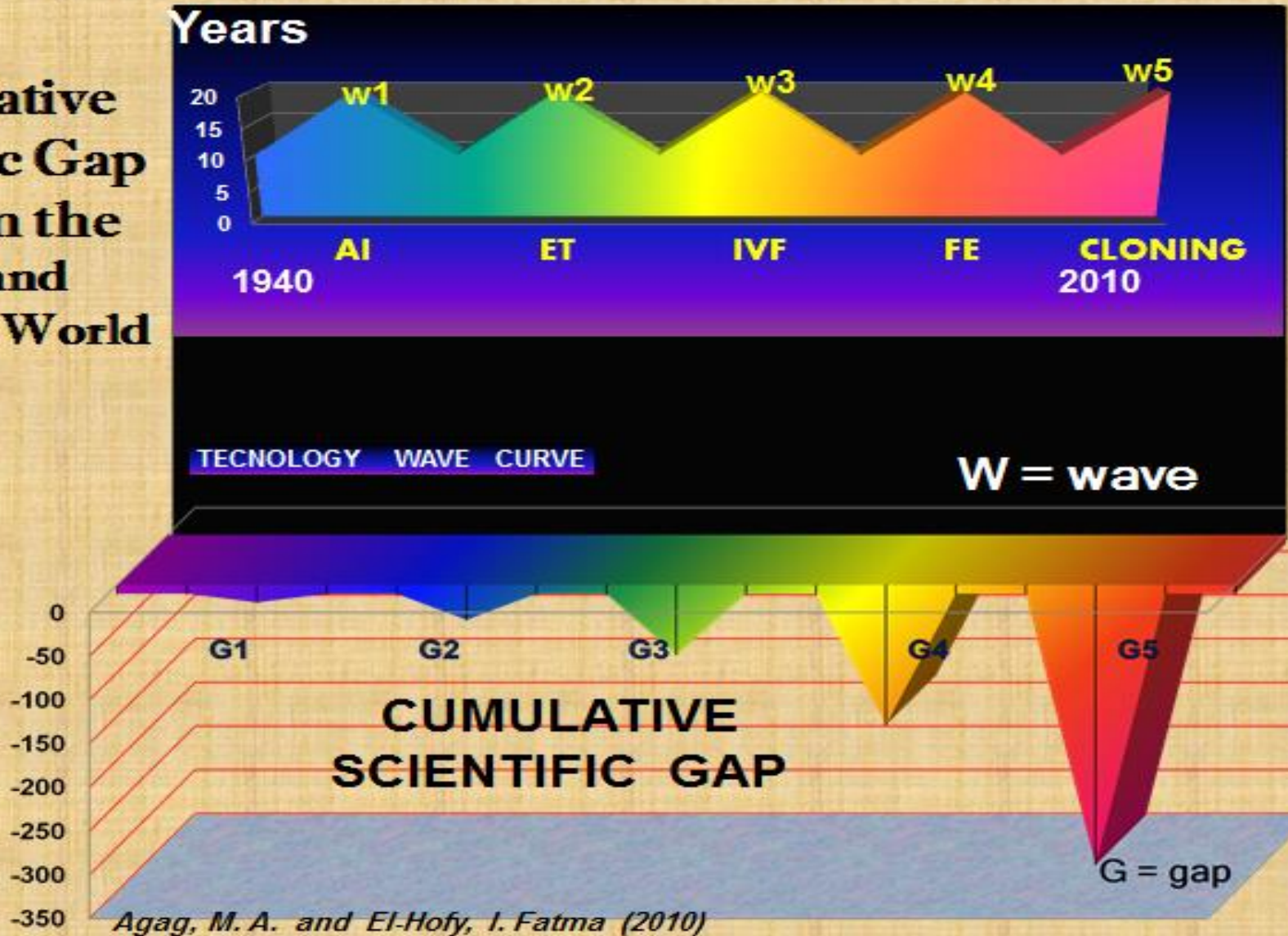
The role of the Veterinarian

When insemination is applied the Veterinarian must pay a great attention to:

- 1. Detection (Heat)**
- 2. Correction (Time)**
- 3. Calculation (SCC)**

Cummulative Scientific Gap

Cummulative Scientific Gap between the West and the Arab World



A.I. Programs

1. Stable-Point System: “Liquid semen”: The farmers bring their animals to the clinic.

- Introduced in Egypt at 1960.
- 14 main centers were established.
- Each center was provided by 3 bulls (F.B.) and 3 buffalo bulls (L.B.) and supplied by equipments for semen collection, dilution and refrigeration at 5 °C.

Stable-Point System

- Collection of semen twice weekly at Sat. & Tues. with two ejaculates.
- Fresh liquid semen was transported to the sub-centers.
- Each sub-center serves about 10 to 15 villages.
- The owner (Farmer) brings his animals to be inseminated at the clinic by a specialist.

Challenges for St. P. System

1. Difficult transportation of cows.
2. Natural service parallel to AI.
3. Lack of farmers knowledge.
4. Infertility problem (30 to 40%).
5. Rough transportation and refrigeration of semen leads to lower CR.
6. About 90% of total cattle and buffaloes are belonging to small farmers.

A.I. Programs

2. Daily-Runway System: “Frozen semen”: The vet. service runs to the farmer's stable.

- It was necessary to change AI services from liquid to frozen semen.
- Two big centers were established:
 1. Abbasia in Cairo for Buffalo semen
 2. Beni Suef in Upper Egypt for cattle semen
- Frozen semen is transmitted into Administrations of AI in the provinces.

Daily-Runway System

- Each Province divided into 5 Big District Centers, each serves 50 Villages through 5 runways (10 Villages/Runway).
- The Runway must be paved, adjacent and farmers co-operative.
- The Specialist has his own Vehicle through his runway twice daily in the morning and in the evening with portable container and insemination kit.

Daily-Runway System

- Inseminated females are enumerated by ear taping for recording system and reproductive history. Pregnancy diagnosis is applied within 2 months.
- The percentage of animals inseminated by this system increased to 20-30%.

Daily Runway System. A.I. in Stable





Daily Runway System





**THANK
YOU!**