

Twenty-five years with CTRI

summarizing the past
anticipating the future

Chuck Rivara
Director
California Tomato Research Institute, Inc.



1991 Snapshot

Processing Tomato crop:

98% direct-seeded

80% furrow / 20% sprinkler irrigated

Record yield & production 31.7/a & 9.89m

Exports <250,000 field ton equivalent

PTAB celebrates its fifth year of operation

CTRI produces its first “Top 50” list and Annual Report

2G mobile technology with 3 users/100 people

Internet use at 1.2 users/100 people



1991 Issues

“Big Green” fails but pesticides a major public concern

Telone[®] banned - industry scrambling (peelers)

Bravo[®], mancozeb under widespread scrutiny

Weed control in direct seeded a major problem

Next 10 years would bring FQPA and a major overhaul of pesticide regulations, the return of Telone[®], and the loss of many older pesticides.



2015 Snapshot

Processing Tomato crop:

95%+ transplanted

85% drip / 15% furrow irrigated

yield & record production 48.5/a & 14.36m

Exports >3 million field tons

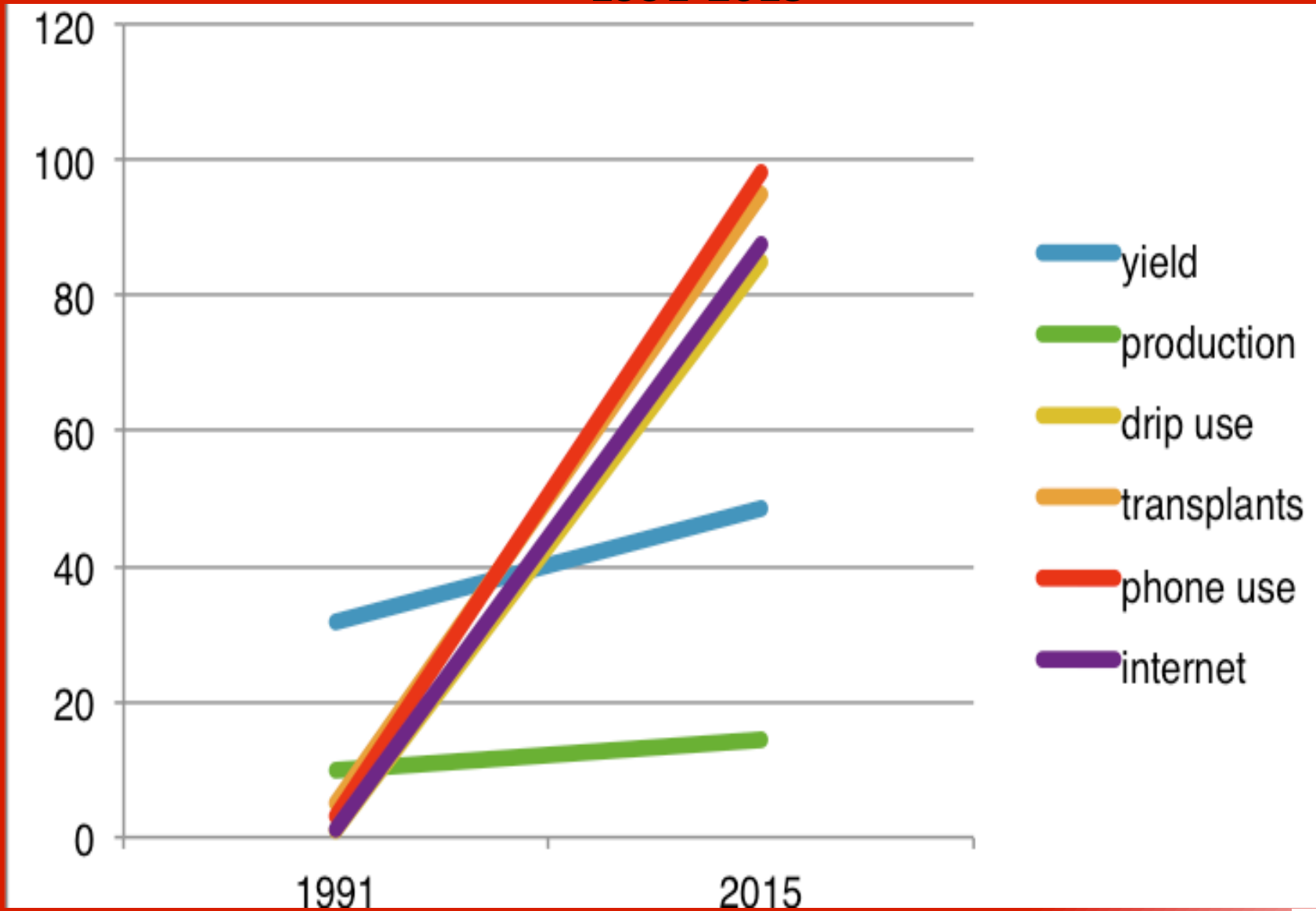
PTAB now produces “Top 50” variety list,
CTRI reports all web & mobile compatible

4G mobile technology with 98 users/100 people

Internet use at 87.4 users/100 people



1991-2015



2015 Issues

Water

Availability, cost

Rules on runoff, groundwater contamination

Catastrophic disease loss

fusarium spp., curly top, spotted wilt

Competing Crops



2040 Snapshot

Not practical to present in this context

Major Issues

Competition for resources: water, labor, capital

Combined risk

Invasive species

Emerging Technologies



Competition for resources

Urban growth

Competitive crops

Regulatory taking

Lack of infrastructure investment



Risk

Competitive crops

Increased input costs relative to return

Erratic weather

Shifting pathology epidemics

genetic resistance

practical alternatives

monitoring, evaluation, prediction



Invasive species

Movement is increasing

Monitoring, response and follow-up

Preparation is now

Seed monitoring

Fusarium, Bacterial Canker, emerging path.

Financial tools – insurance

Government agencies APHIS, CDFA, CDPR



Emerging Technologies

Intensive Fertigation

Grafting

Greenhouses

Biotech



Thank you

