

**CSIS**

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**World Population Trends,  
Regional Issues,  
and the Middle East  
as a Case Study**

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**CSIS  
Middle East Dynamic Net Assessment**

**Working Draft**

**February, 1996**

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## **Population Models**

**Use World Bank Models.**

**Conservative and reflects declining estimates of growth over previous years**

**Birth rate declining sharply on global basis, but momentum of past growth may force further increases for century to come.**

**Health improvements increase some populations, but aging needs to slow net increase in death rate.**

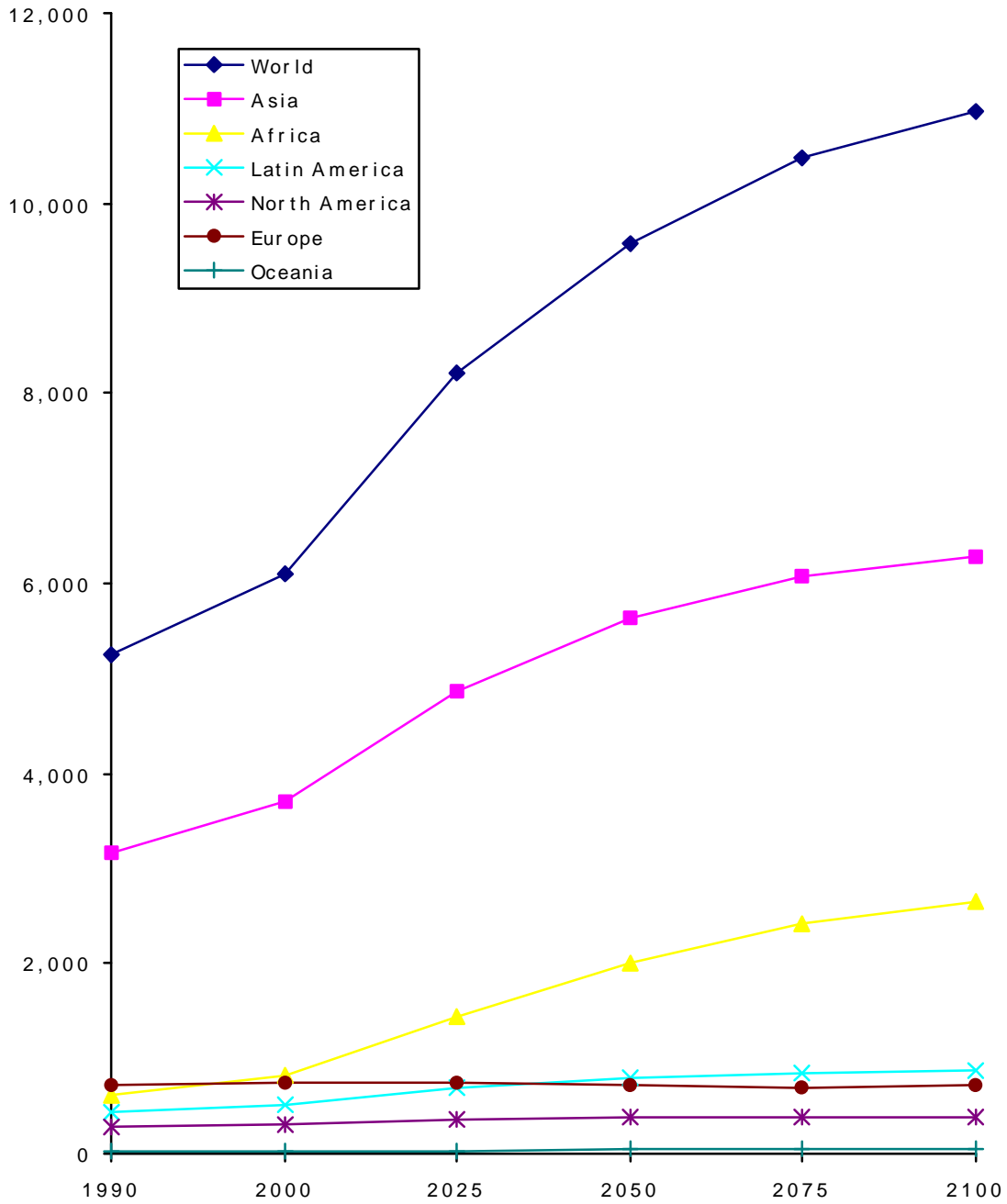
**Fertility declines in proportion to level and rate of development.**

**More rapid fertility rate declines do not have major impact: World population in 2100 is 9.7 billion vs. 11.4 in base case and 12.2 billion if fertility increases.**

**Assumes rate of AIDs infections cut 50% per decade, and no major new diseases.**

Chart One

**Estimated Trends in Total World Population in Millions During 1990-2100**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **A Much Poorer World**

**Population grows far more quickly in poor areas.**

**Chart Two shows drastic increase in poor relative to all other income categories.**

**“North-South” crisis projected by 2025.**

**Varies by region: Japan, Europe, and North American far more wealthy.**

**East Asia developing in terms of per real capita income.**

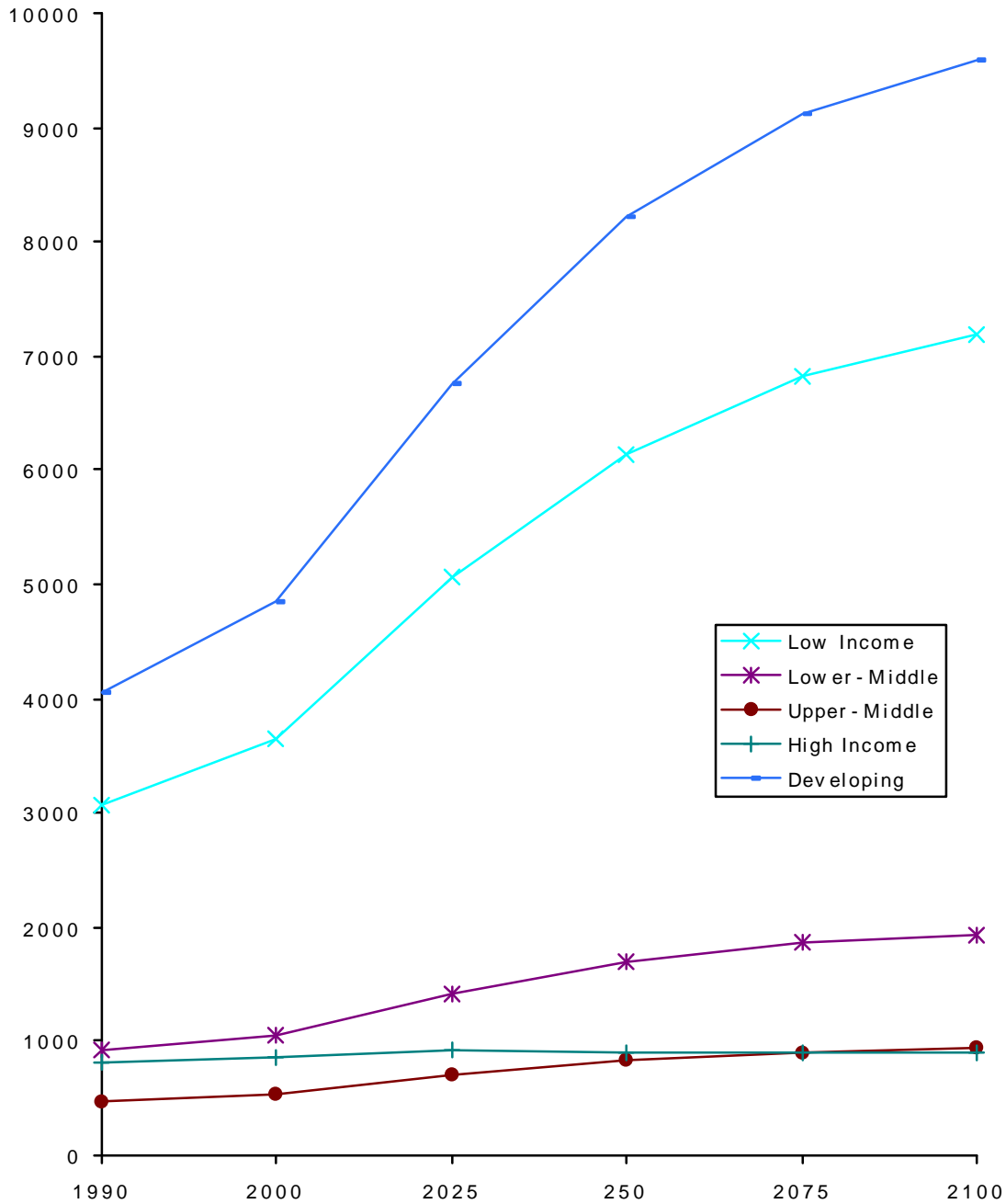
**Most of rest of Asia and Middle East declining or no major increase.**

**Latin American development uncertain.**

**Africa a disaster zone.**

Chart Two

**World Population Growth By Income Group  
In Millions During 1990-2100**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **Regional Trends**

**Asia growing most in population: From 3.1 billion in 1990 to 6.3 billion in 2100 -- little decline in rate of growth during period.**

**Africa growing at much faster rate: From 627 million in 1990 to 2.6 billion in 2100 -- almost no decline in rate of growth during period.**

- **Doubles share of total population from 12% to 24%.**

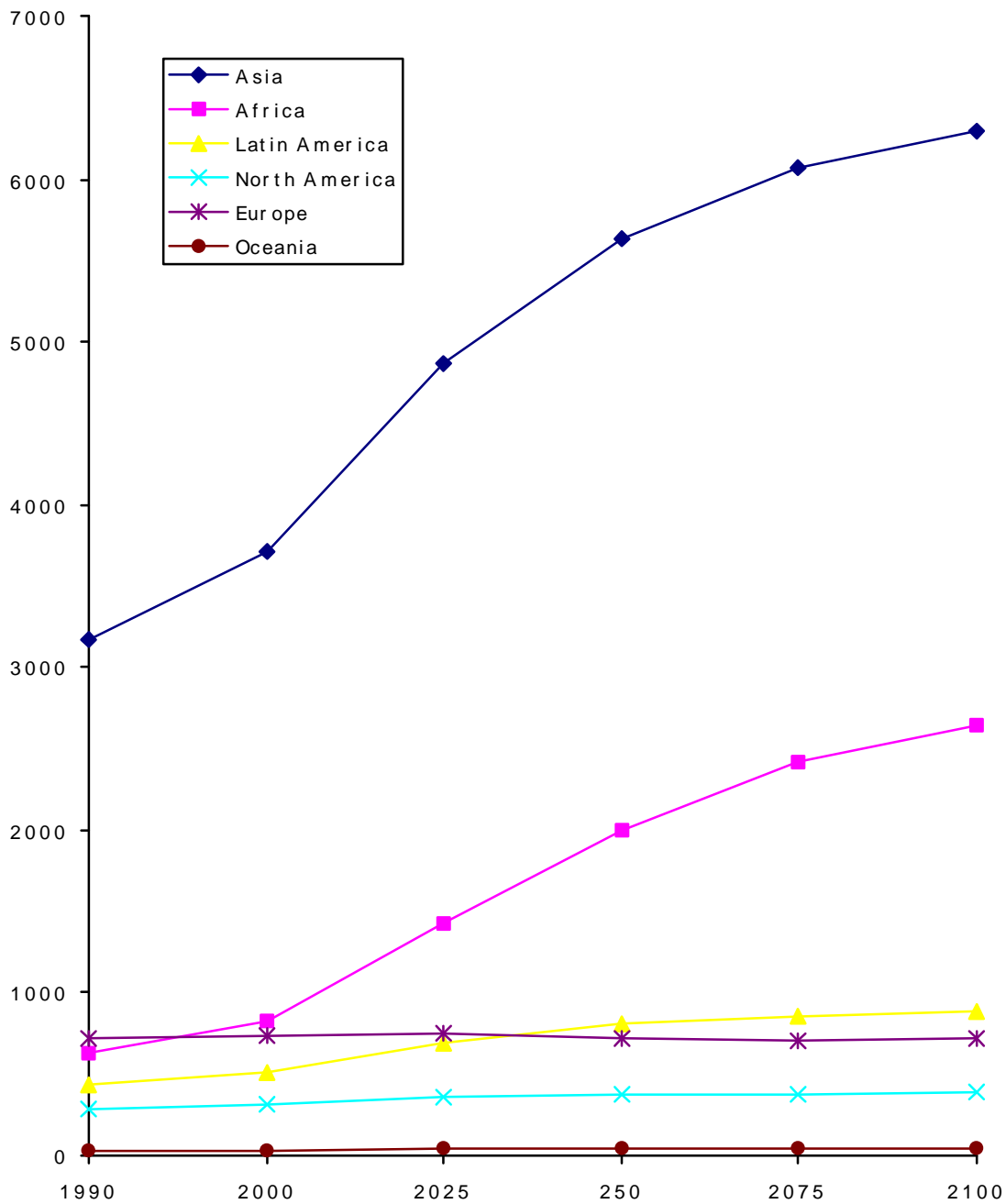
**US and Europe far more static:**

- **Europe drops 723 million in 1990 to 714 million in 2100. Declines from 14% to 7% of world total.**
- **North America grows from 280 million in 1990 to 384 million in 2100 but all of growth is driven by Mexico and Latin American and immigrant population in US.**

**Latin American doubles between 1990 and 2050, but then levels off: From 435 million in 1990 to 835 million in 2100.**

Chart Three

**Estimated Trends in Total World Population By Region During 1990-2100 in Millions**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **North and South American Trends**

### **North America grows:**

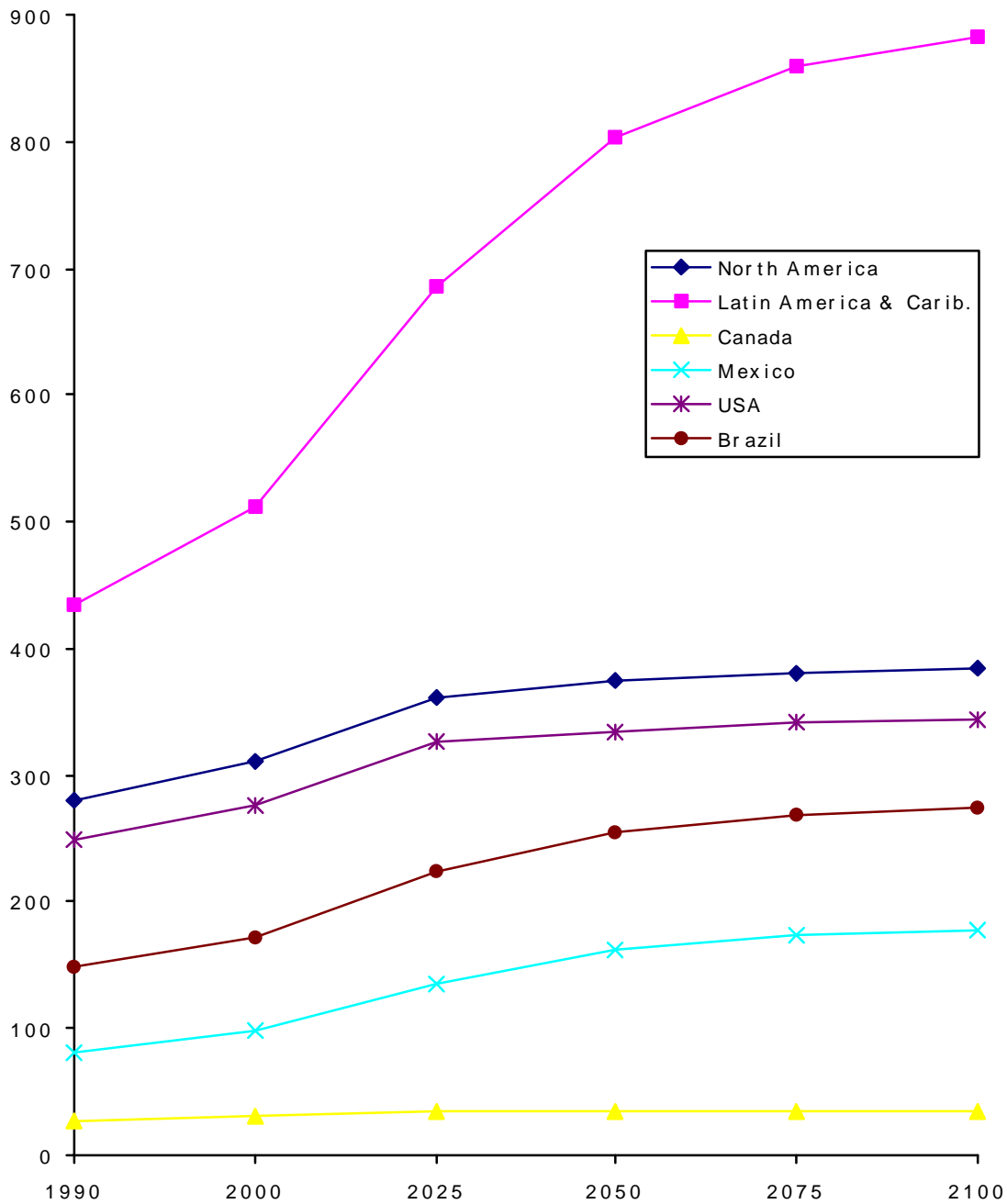
- **280 million in 1990 to 384 million in 2100**
- **Virtually all of growth is driven by Mexico and Latin American and immigrant population in US.**

### **Latin American doubles between 1990 and 2050, but then levels off:**

- **From 435 million in 1990 to 835 million in 2100.**
- **Leveling depends on development, social change as 2010. Not inherent in current behavior.**
- **Varies by income and ethnic origin.**

**Chart Four**

**Estimated Trends in North and Latin American Population During 1990-2100 in Millions**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **Regional Trends**

**Canada static. Only maintains population because of non-European immigration.**

**US population static except for Latin and immigrant population.**

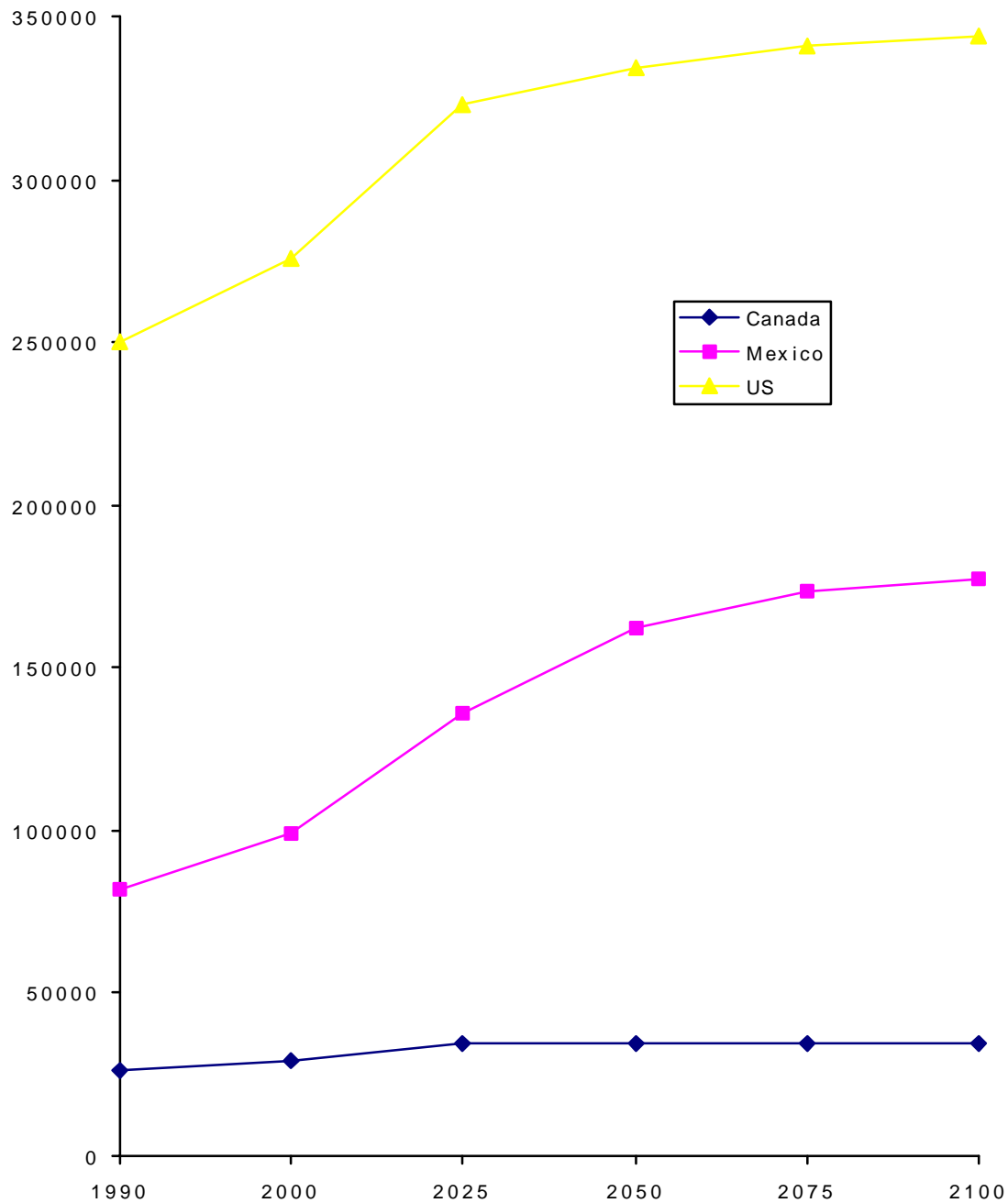
- **Americans of European origin drop steadily as percentage of total.**
- **Down to half population by 2050?**
- **A little over one-third by 2100?**

**Mexico doubles between 1990 and 2050, and then levels out because of changes in social behavior that are assumed to begin after 2000.**

- **From 82 million in 1990 to 162 million in 2050, and only to 177 million in 2100.**

Chart Five

### Estimated Trends in North America's Population During 1990-2100 in Millions



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **Asian Trends**

**Asia growing most in population:**

- **From 3.1 billion in 1990 to 6.3 billion in 2100**
- **East and South East Asia rises from 1,788 million in 1990 to 2,644 million in 2050, and 2,824 million in 2100.**
- **South Asia rises from 1,186 million in 1990 to 2,484 million in 2050, and 2,847 million in 2100.**
- **Central Asia rises from 67 million in 1990 to 129 million in 2050, and 144 million in 2100.**

**Little decline in current rate of growth during period.**

**China accounts for one-fifth of population.**

- **Fertility rate below replacement rate, but so much momentum from current youth grows over 1% per year**
- **World's Largest state until 2040.**

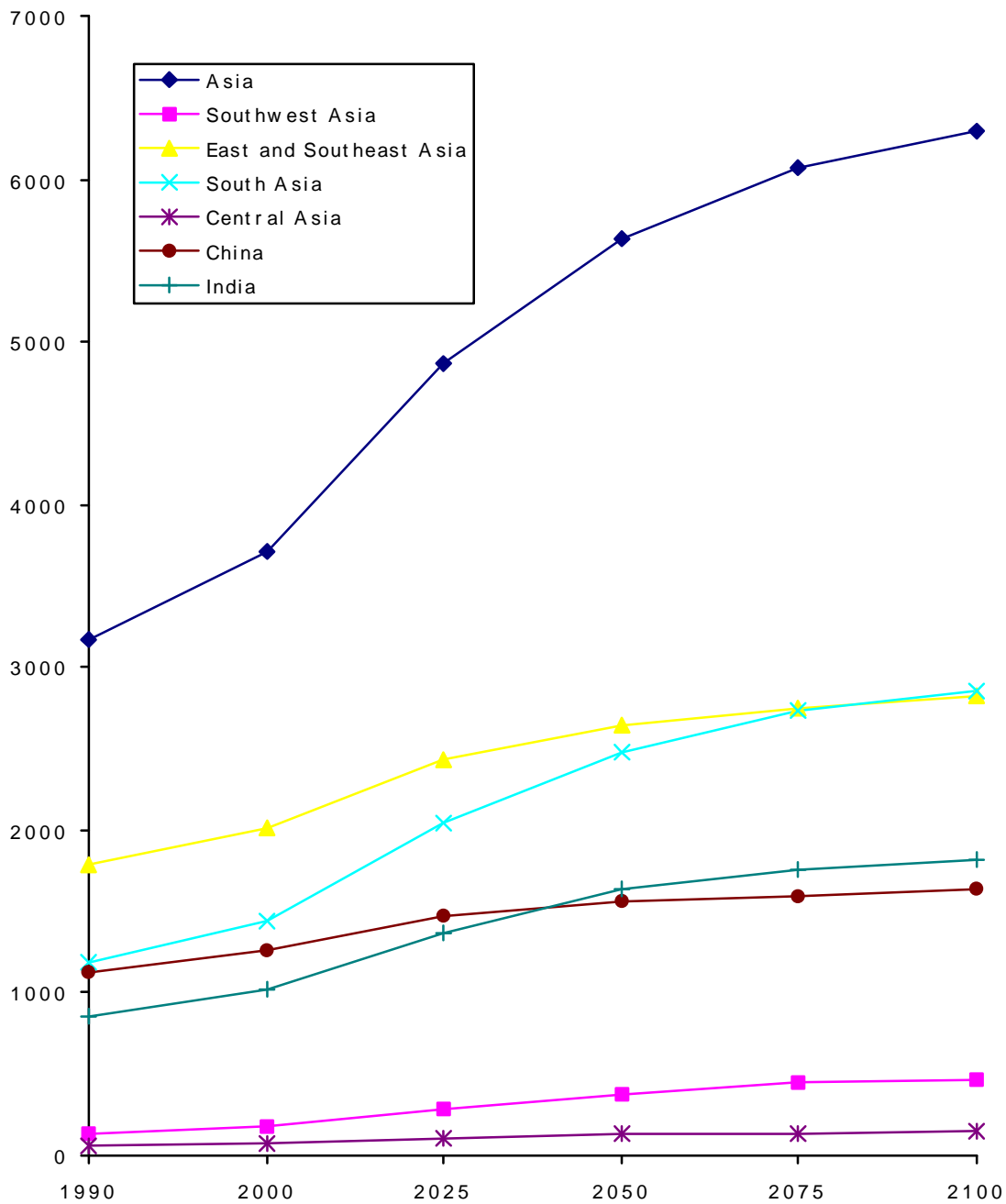
**India has much higher growth rate of 1.9% and will exceed China's population in 2040.**

**Asian development will be limited for most of Asia's people:**

- **Per capita incomes will rise, but many nations will see very little real rise, and virtually all will fail to catch up with more developed states.**
- **Per capita income gaps between developed Western states and most of Asia's population will be nearly as great in 2100 as in 1990.**

Chart Six

### Estimated Trends in Asian Population During 1990-2100 in Millions



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **East Asian Trends**

**East Asia not growing as rapidly as South Asia.**

**China accounts for virtually all growth.**

- **Fertility rate below replacement rate, but so much momentum from current youth grows over 1% per year**
- **World's Largest state until 2040.**

**Japan drops from 126 million in 1990 to 115 million in 2050, and 108 million in 2100.**

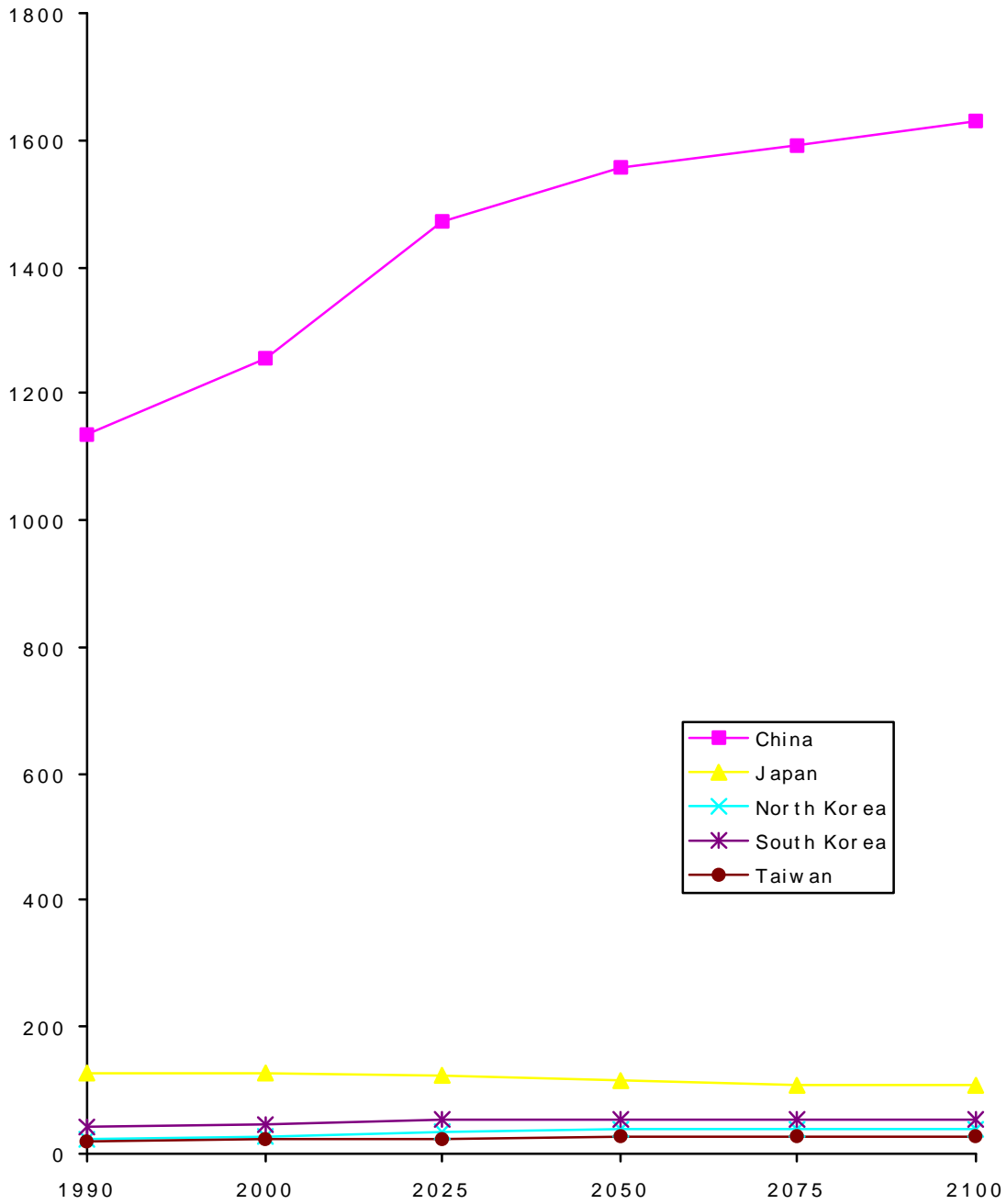
**North Korea rises from 22 million in 1990 to 38 million in 2050, and 40 million in 2100.**

**South Korea rises from 43 million in 1990 to 54 million in 2050, but growth levels off and only reaches 55 million in 2100.**

**Taiwan rises from 20 million in 1990 to 26 million in 2050, but growth levels off and is still 26 million in 2100.**

Chart Seven

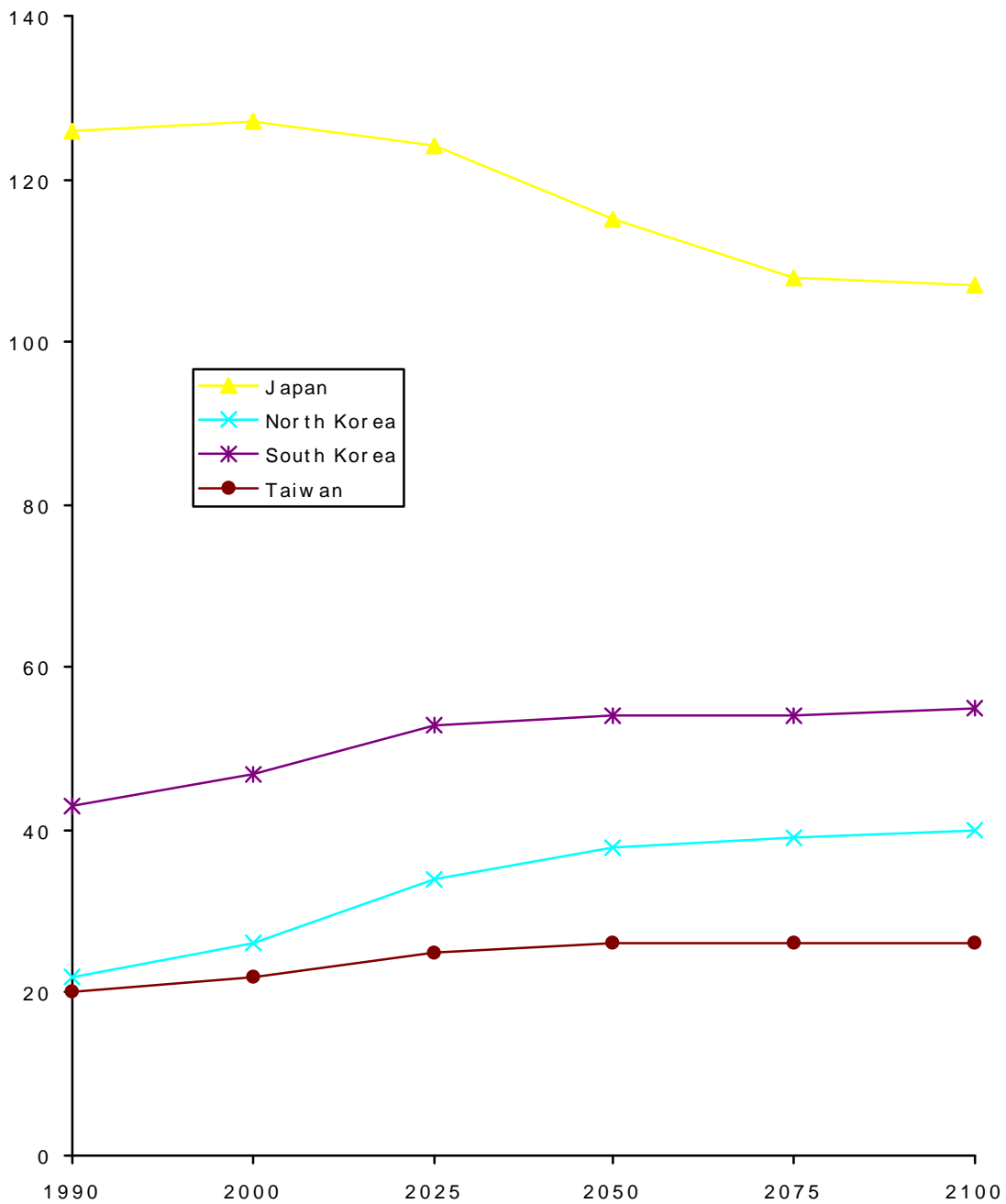
**Estimated Trends in East Asian Population During 1990-2100 in Millions**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

Chart Eight

### Estimated Trends in Population of Smaller East Asian Nations During 1990-2100 in Millions



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **African Trends**

**Africa growing at fastest regional rate: From 627 million in 1990 to 2.6 billion in 2100 -- almost no decline in rate of growth during period.**

- **Doubles share of total population from 12% to 24%.**

**North Africa is only part of Africa that shows some limit to rate of growth.**

- **Still grows from 140 million in 1990 to 261 million in 2025, 328 million in 2050, and 386 million in 2100.**

**East African growth may make this region a “basket case.”**

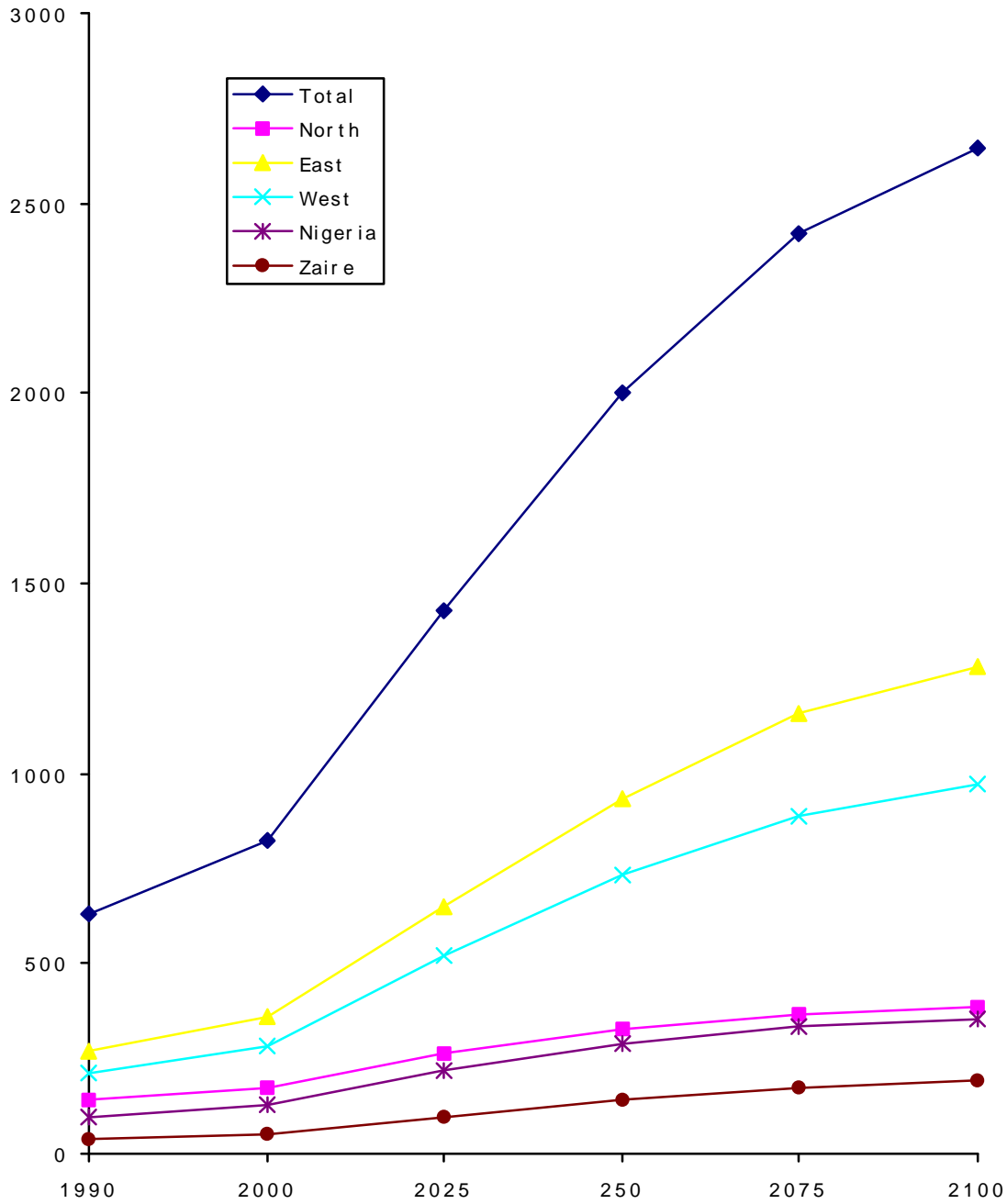
- **Grows from 273 million in 1990 to 1,048 million in 2025, 1,178 million in 2050, and 1,282 million in 2100. Leveling after 2050 assumes crisis, not development.**

**West Africa also very bad.**

- **Grows from 214 million in 1990 to 520 million in 2025, 735 million in 2050, and 975 million in 2100.**

Chart Nine

### Estimated Trends in African Population During 1990-2100 in Millions



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **North African Trends: 1990-2030**

**Chart Ten shows a shorter range projection which is inherently more accurate because of population momentum. Projections through 2010 very difficult to alter without the most draconian social policy.**

**North Africa already grew from 140 million in 1990 to 157 million in 1995.**

- **Will rise to 174 million in 2000, 192 million in 2005, and 211 million in 2010.**

**Algeria is a critical case.**

- **Grew from 25 million in 1990 to 28 million in 1995.**
- **Will rise to 131 million in 2000, 35 million in 2005, and 39 million in 2010.**

**Egypt even more critical case.**

- **Grew from 54 million in 1990 to 58 million in 1995.**
- **Will rise to 63 million in 2000, 67 million in 2005, and 73 million in 2010.**

**Libya will nearly double during 1990-2010 from 4.5 to 8.7 million.**

**Morocco will rise from 25 to 35 million.**

**Tunisia will rise from 8 to 12 million.**

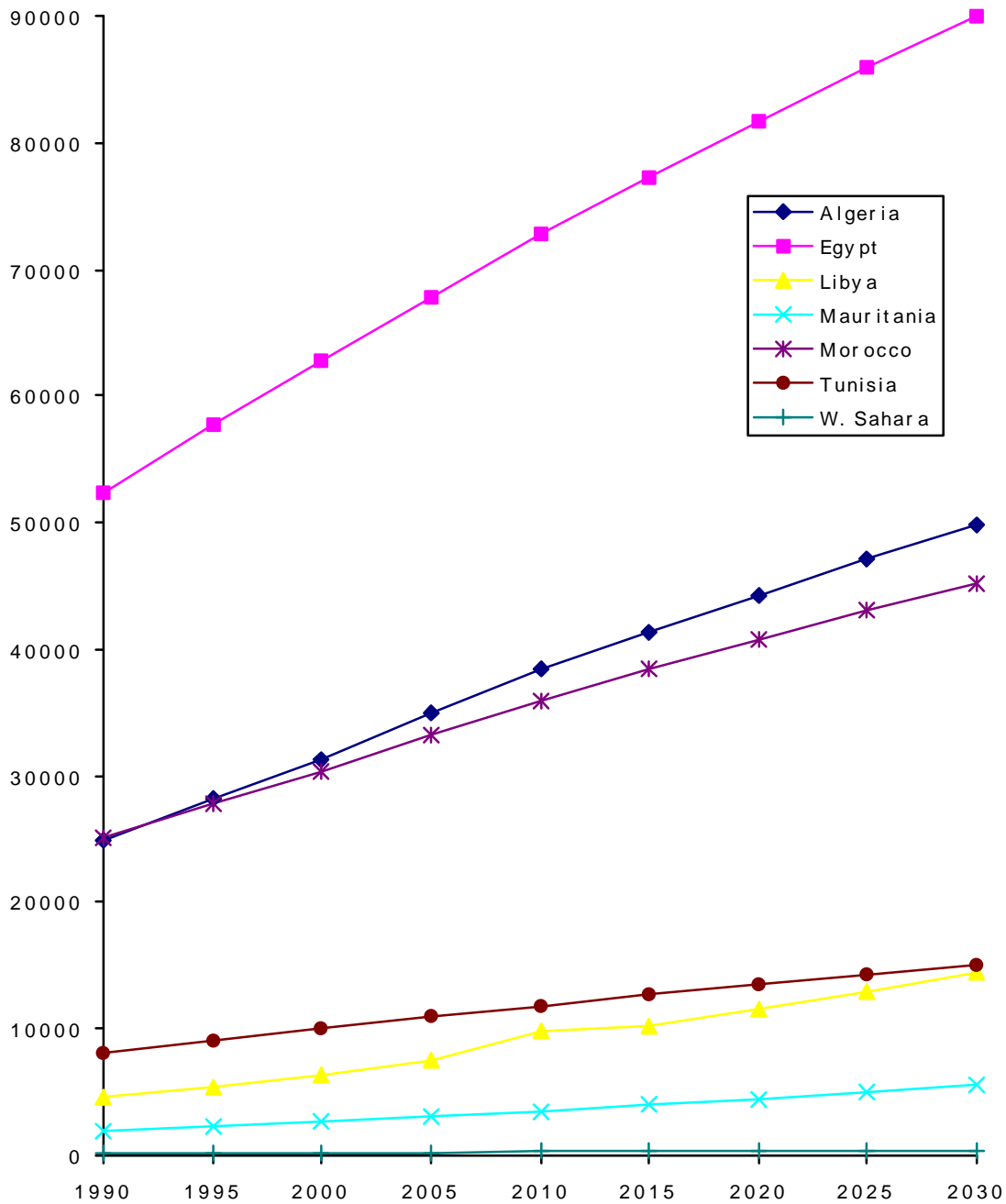
**Will impose major construction, infrastructure, water, education, job creation, import, desertification, and social stability problems on all countries in the area.**

**Growth in real per capita income often very limited.**

**Trends in outyears in Charts Ten and Eleven even more disturbing.**

Chart Ten

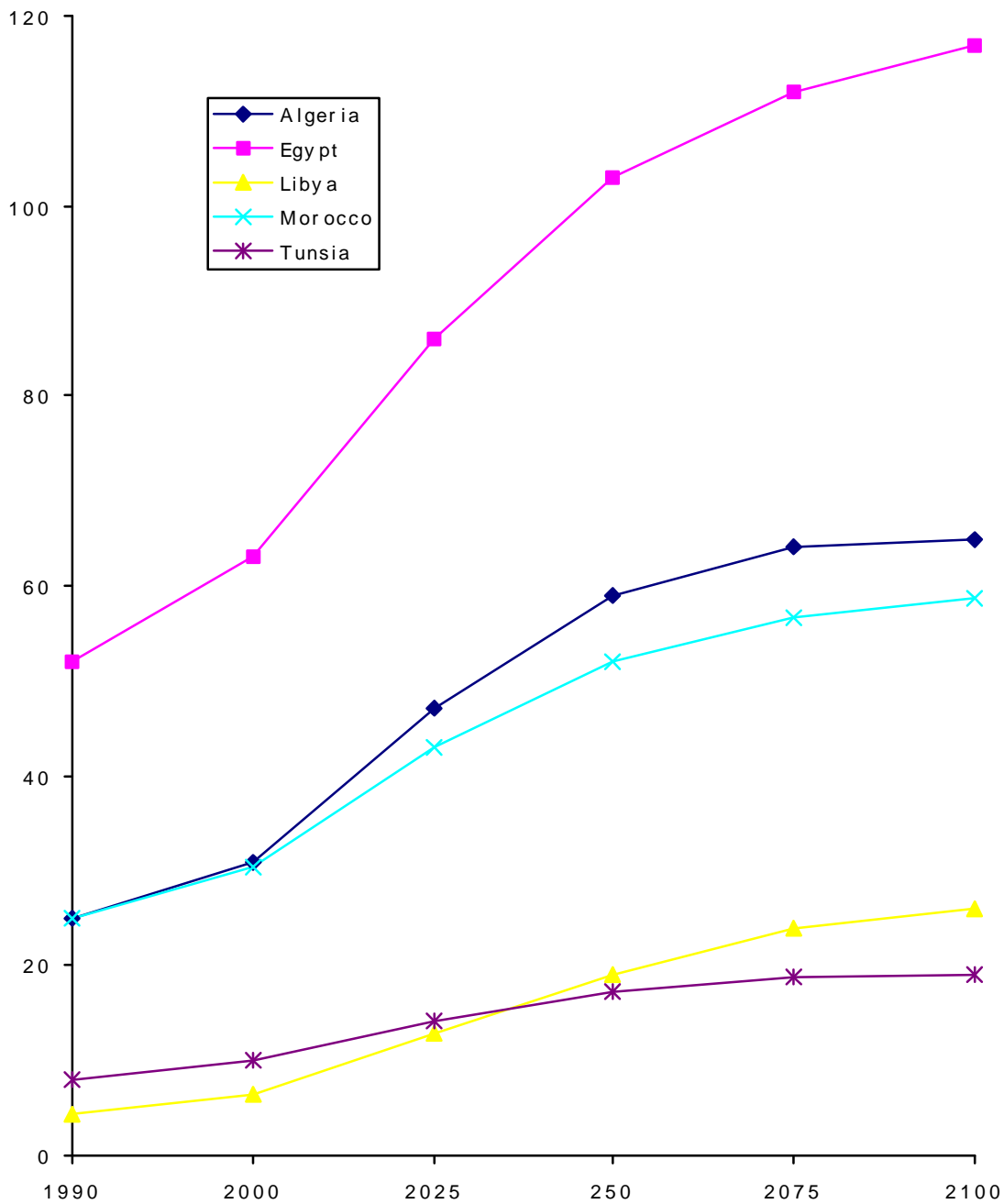
**Estimated Trends in Population of North Africa  
During 1990-2030 in 1,000s**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

Chart Eleven

### Estimated Trends in Population of North Africa During 1990-2100 in Millions



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **Arab-Israeli Trends: 1990-2030**

**Egypt remains a critical case, and may be little growth in real per capita income.**

- **Grew from 54 million in 1990 to 58 million in 1995.**
- **Will rise to 63 million in 2000, 67 million in 2005, and 73 million in 2010.**

**Population growth seriously threatens Syria's development:**

- **Grew from 12 million in 1990 to 14 million in 1995.**
- **Will rise to 17 million in 2000, 20 million in 2005, and 23 million in 2010.**

**Lebanon's growth rate slower: Will rise from 4 to 5 million during 1995-2010.**

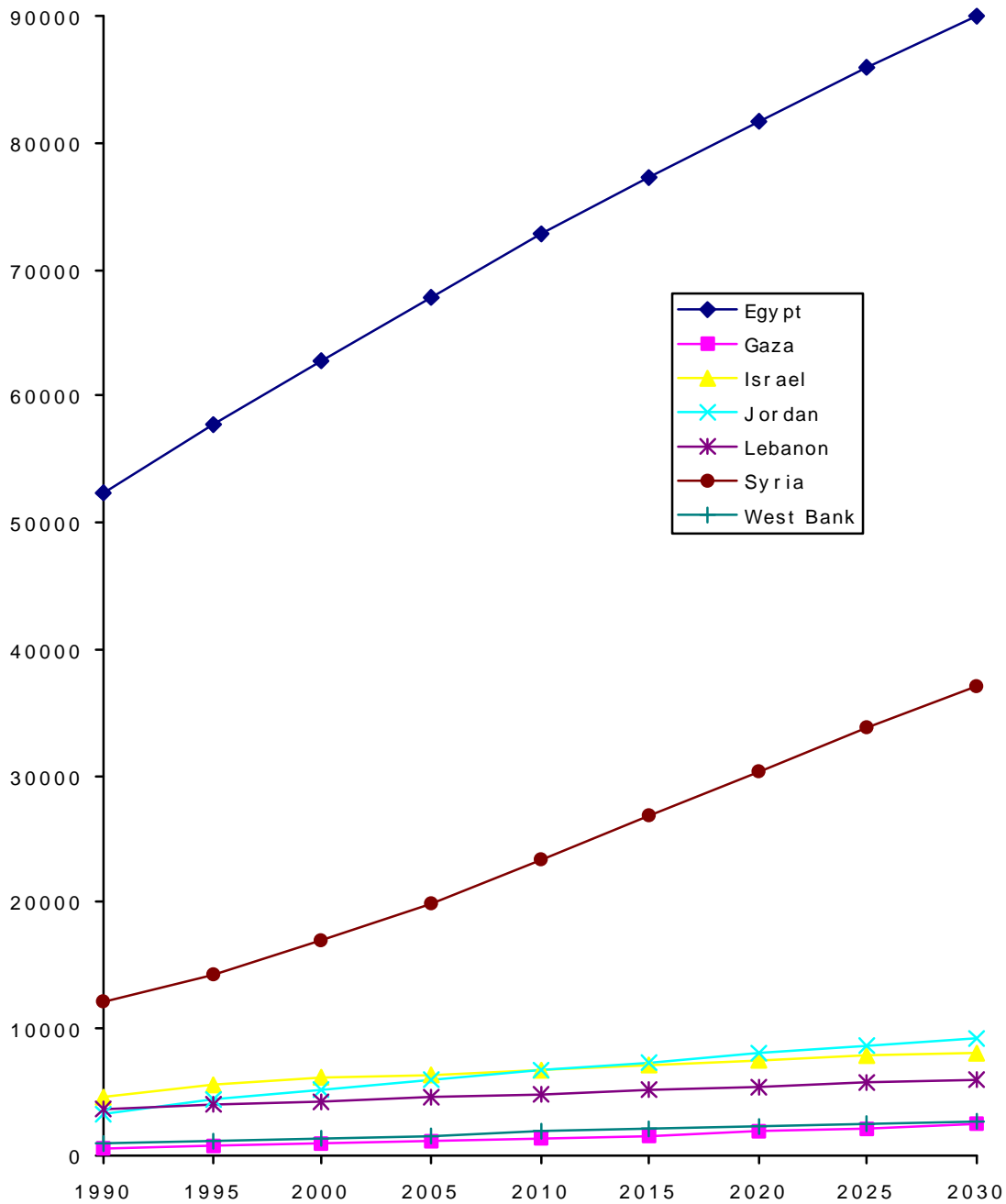
**Will impose major construction, infrastructure, water, education, job creation, import, desertification, and social stability problems on all countries in the area.**

**Growth in real per capita income often very limited.**

**Trends in outyears in Charts Twelve and Thirteen even more disturbing.**

Chart Twelve

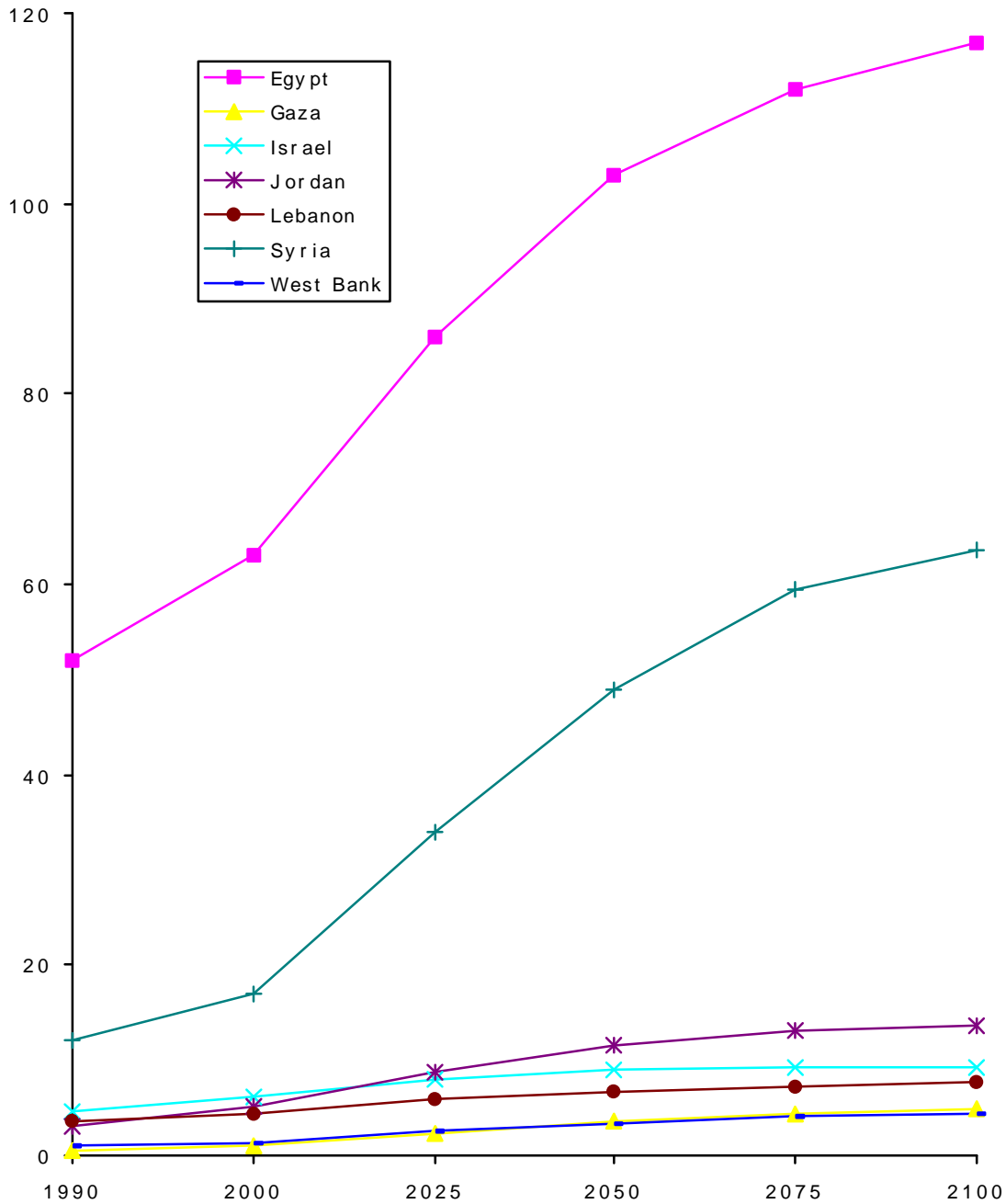
### Estimated Trends in Population of the Arab-Israeli Ring States During 1990-2030 in 1,000s



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

Chart Thirteen

### Estimated Trends in Population of the Arab-Israeli Ring States During 1990-2100 in Millions



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **Trends in Gaza, Israel, Jordan, and West Bank: 1990-2030**

### **Population growth seriously threatens Jordan's development:**

- **Grew from 3.2 million in 1990 to 4.4 million in 1995.**
- **Will rise to 5.1 million in 2000, 5.9 million in 2005, and 6.7 million in 2010.**

**Israel will only rise from 4.6 to 6.8 million.**

**However, population growth seriously threatens Gaza's development unless integrated into broader economic region:**

- **Grew from 610,000 in 1990 to 795,000 in 1995.**
- **Will rise to 953,000 in 2000, 1.15 million in 2005, and 1.37 million in 2010.**

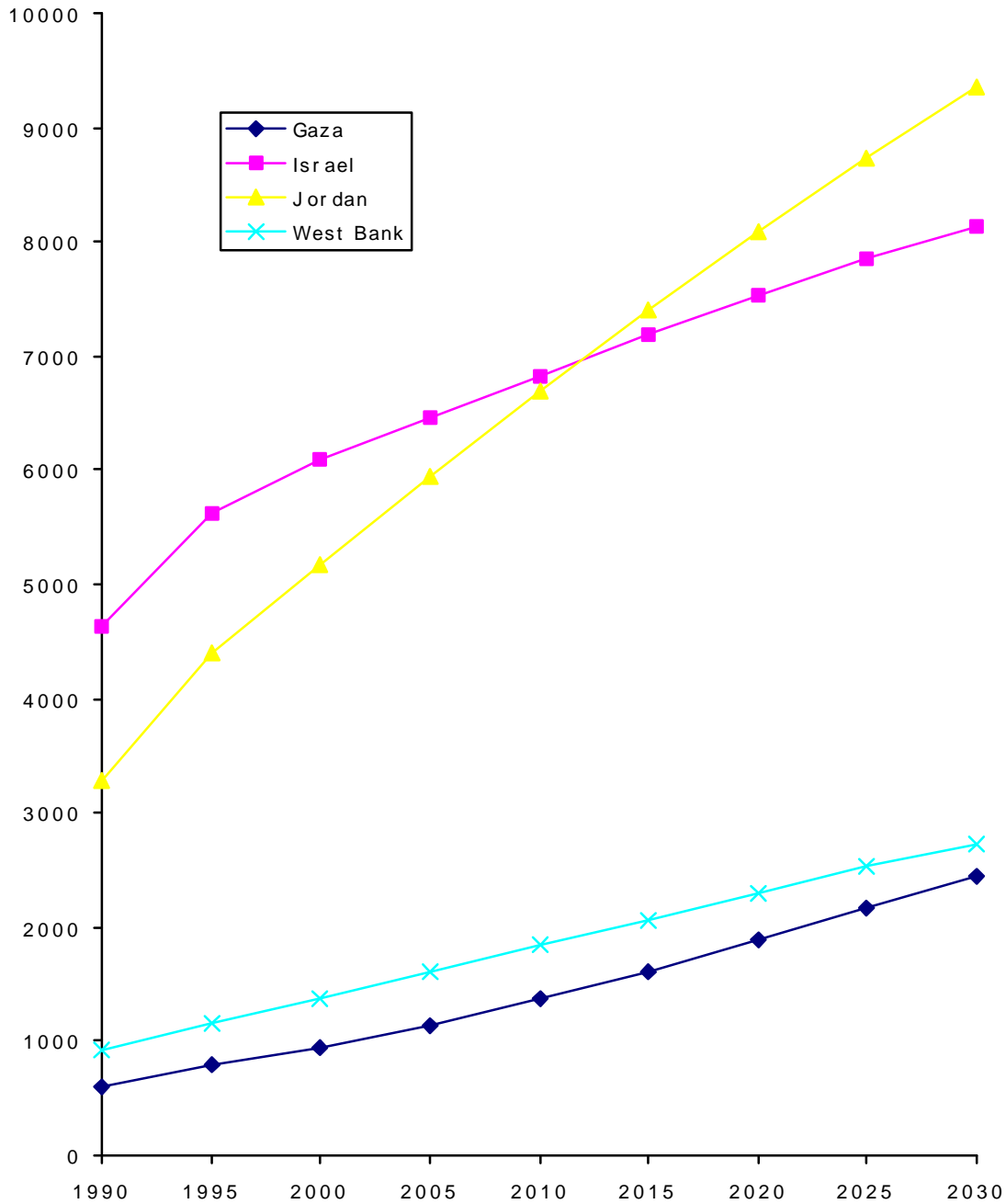
**Same true of West Bank:**

- **Grew from 916,000 in 1990 to 1.15 million in 1995.**
- **Will rise to 1.37 million in 2000, 1.60 million in 2005, and 1.84 million in 2010.**

**Trends in outyears in Charts Fourteen and Fifteen even more disturbing.**

Chart Fourteen

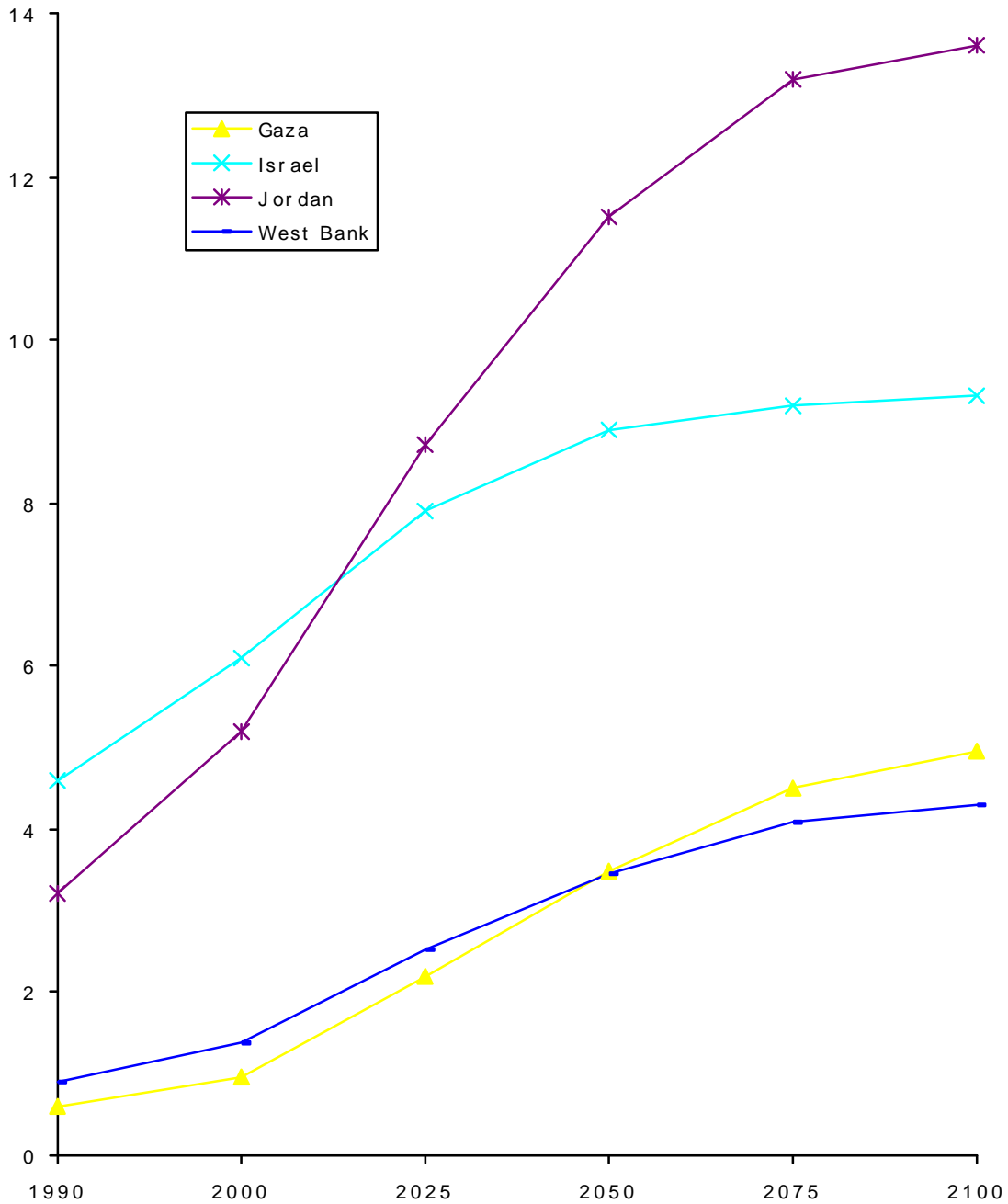
### Estimated Trends in Population of the Arab-Israeli Ring States During 1990-2030 in 1,000s



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

Chart Fifteen

### Estimated Trends in Population of the Arab-Israeli Ring States During 1990-2100 in Millions



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **Gulf Trends: 1990-2030**

**Population growth is a critical threat to Iran, Iraq, Saudi Arabia, and Yemen. Oil wealth cannot offset a steady drop in per capita income unless far more serious cuts in growth take place.**

- **Saudi real per capita income already 50% of level in mid-1980s.**
- **Iranian real per capita income down to pre-oil boom levels of 1972.**
- **Iraq real per capita income down 50% between 1980 and 1989, now are crisis level.**

**Iran is most a critical case, and population growth may prevent serious future growth in real per capita income.**

- **Grew from 56 million in 1990 to 65 million in 1995.**
- **Will rise to 75 million in 2000, 85 million in 2005, and 96 million in 2010.**

**Population growth threatens Iraq's post-Sanctions development:**

- **Grew from 18.1 million in 1990 to 21.0 million in 1995.**
- **Will rise to 24.5 million in 2000, 28.4 million in 2005, and 32.5 million in 2010.**

**Saudi Arabia also faces growing problems:**

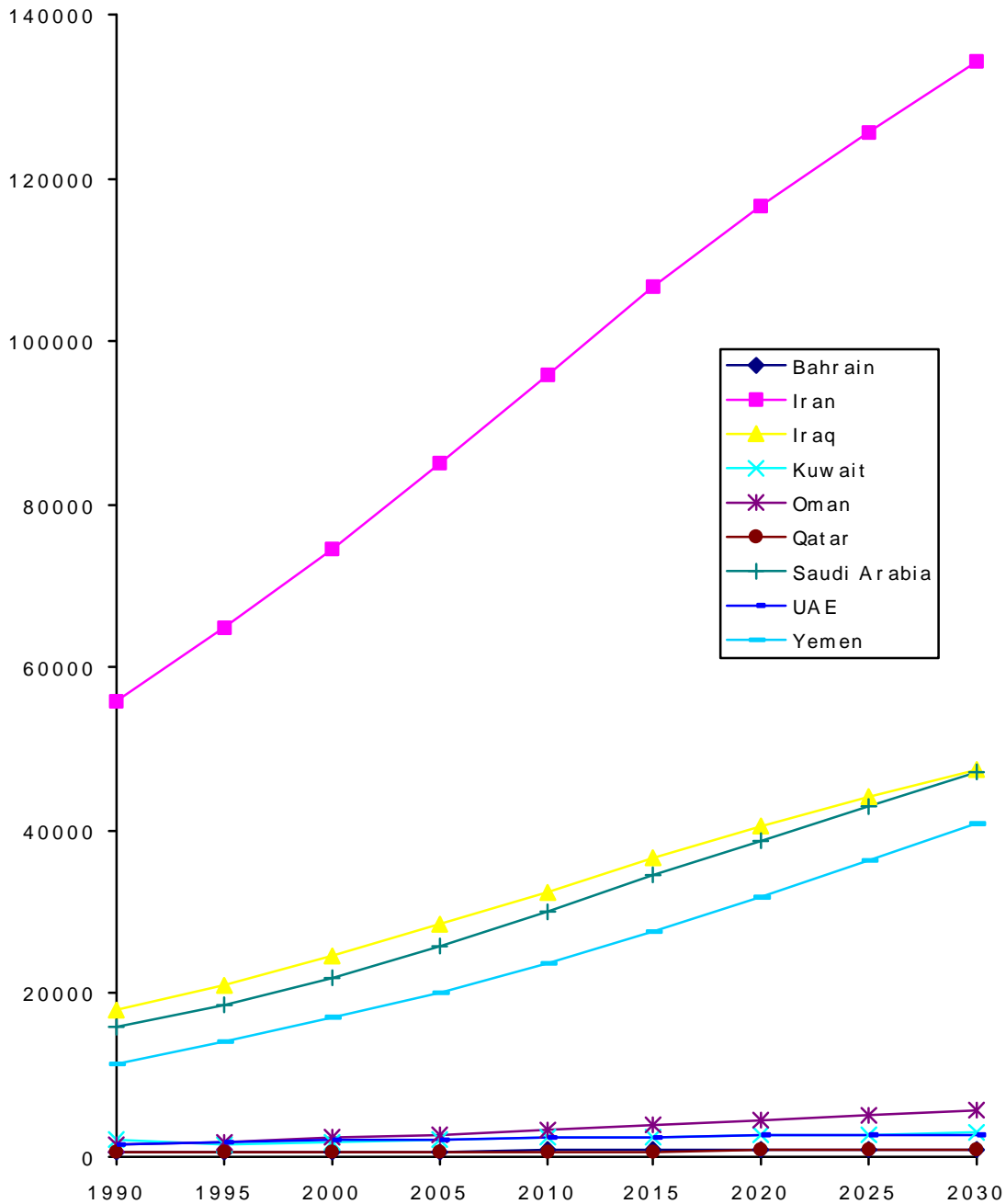
- **Grew from 15.8 million in 1990 to 18.6 million in 1995.**

- **Will rise to 22.0 million in 2000, 25.8 million in 2005, and 30.0 million in 2010. Nearly doubles between 1990 and 2010.**

**Trends in outyears in Charts Sixteen and Seventeen even more disturbing.**

Chart Sixteen

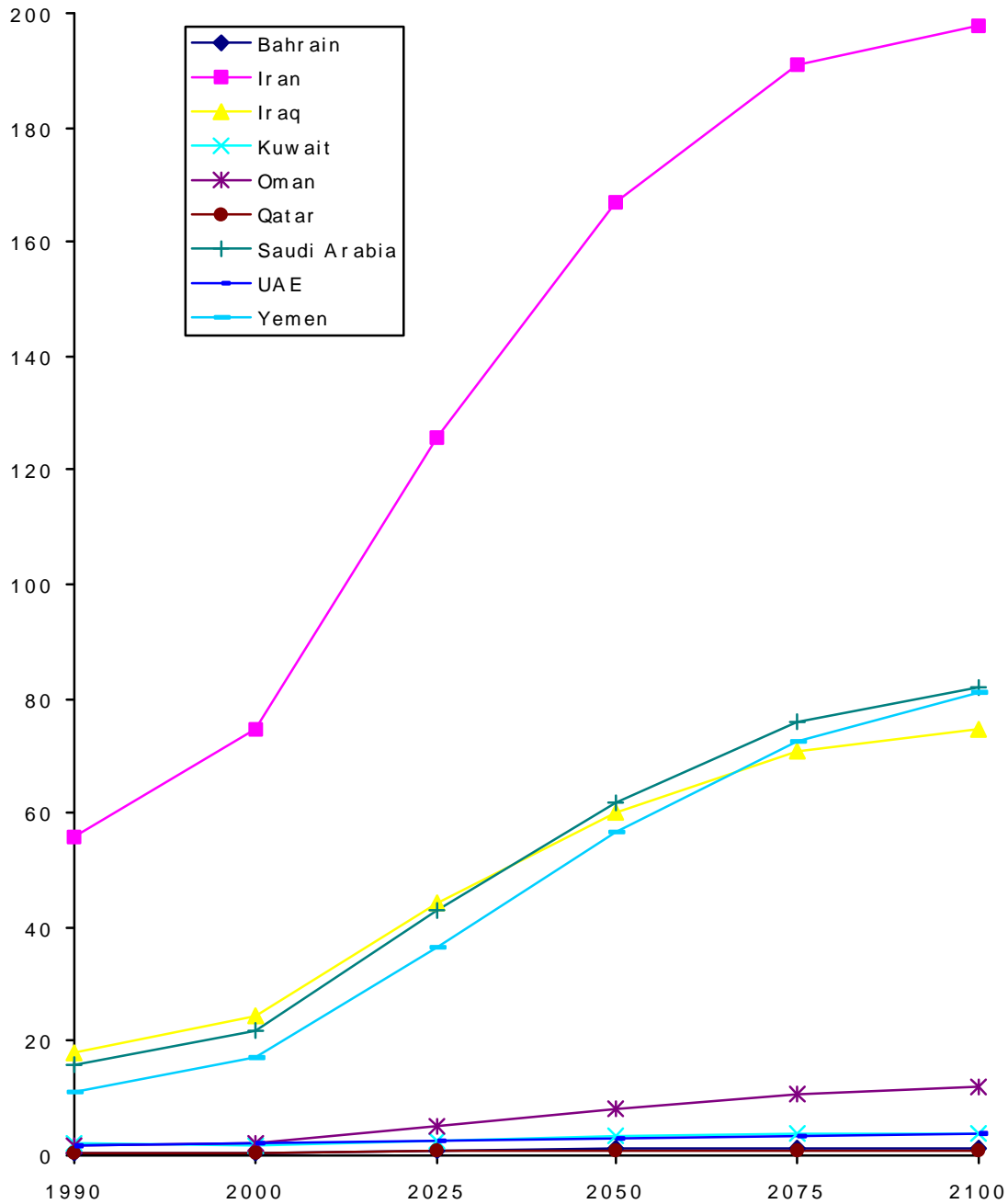
**Estimated Trends in Population of the Gulf States  
During 1990-2030 in 1,000s**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

Chart Seventeen

**Estimated Trends in Population of the Gulf States  
During 1990-2100 in Millions**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **Smaller Gulf Country Trends: 1990-2030**

**Oman is a demographic nightmare case, and could be serious drop in real per capita income.**

- **Grew from 1.5 million in 1990 to 1.9 million in 1995.**
- **Will rise to 2.3 million in 2000, 2.8 million in 2005, and 3.3 million in 2010.**

**Bahrain also faces serious demographic pressures because of lack of oil wealth.**

- **Grew from 503,000 in 1990 to 572,000 in 1995.**
- **Will rise to 639,000 in 2000, 704,000 in 2005, and 771,000 in 2010.**
- **Likely to be 70%+ Shi'ite in 2010.**

**Other smaller Gulf states face much less serious problem if they reduce foreign labor.**

**Qatar can handle increase if it expels foreign labor:**

- **Grew from 486,000 in 1990 to 544,000 in 1995.**
- **Will rise to 598,000 in 2000, 646,000 in 2005, and 693,000 in 2010.**

**UAE will face problems, but not a crisis:**

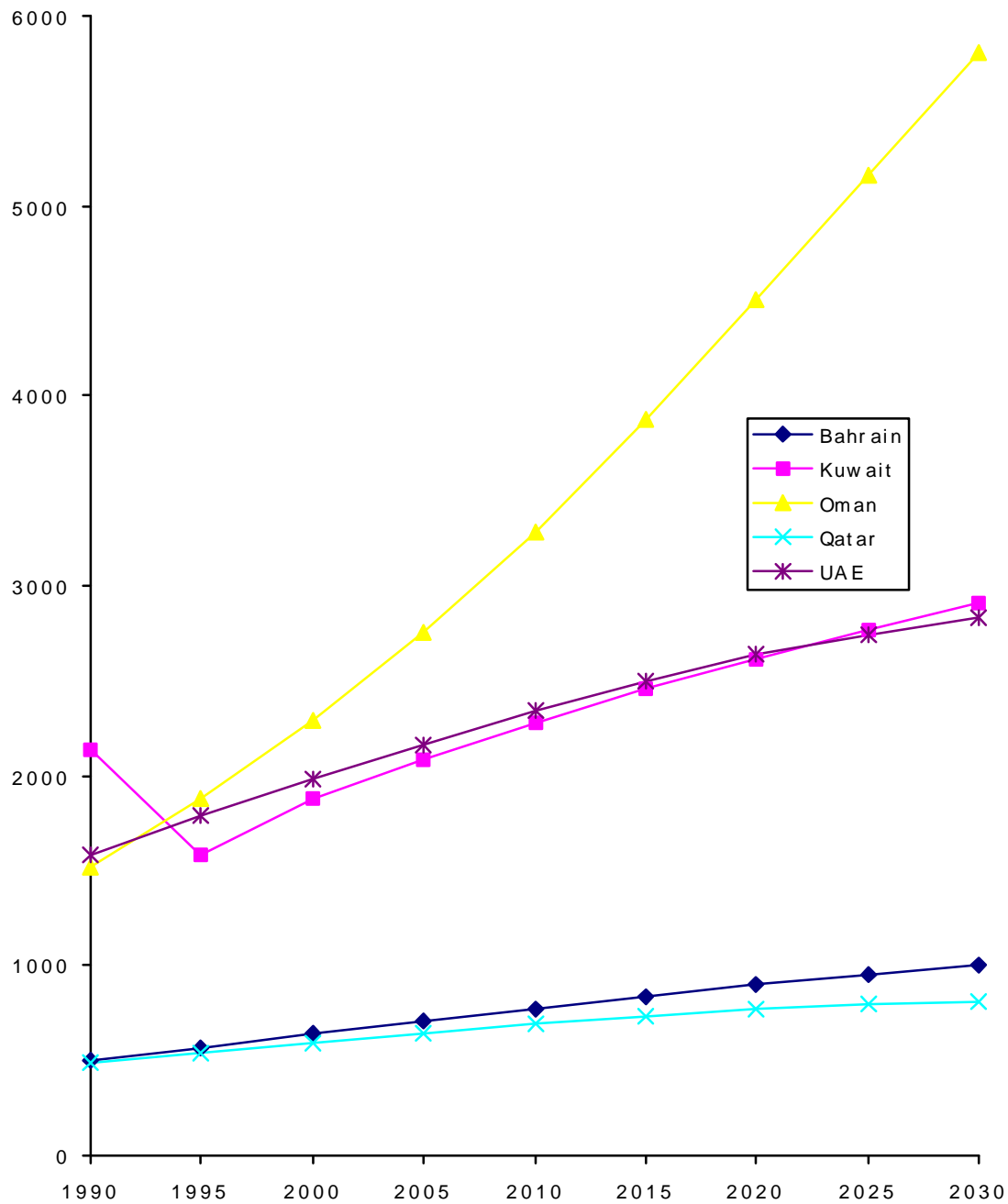
- **Grew from 1.6 million in 1990 to 1.8 million in 1995.**

- **Will rise to 2.0 million in 2000, 2.2 million in 2005, and 2.3 million in 2010.**

**Trends in outyears in Charts Eighteen and Nineteen show urgency of Omani action.**

**Chart Eighteen**

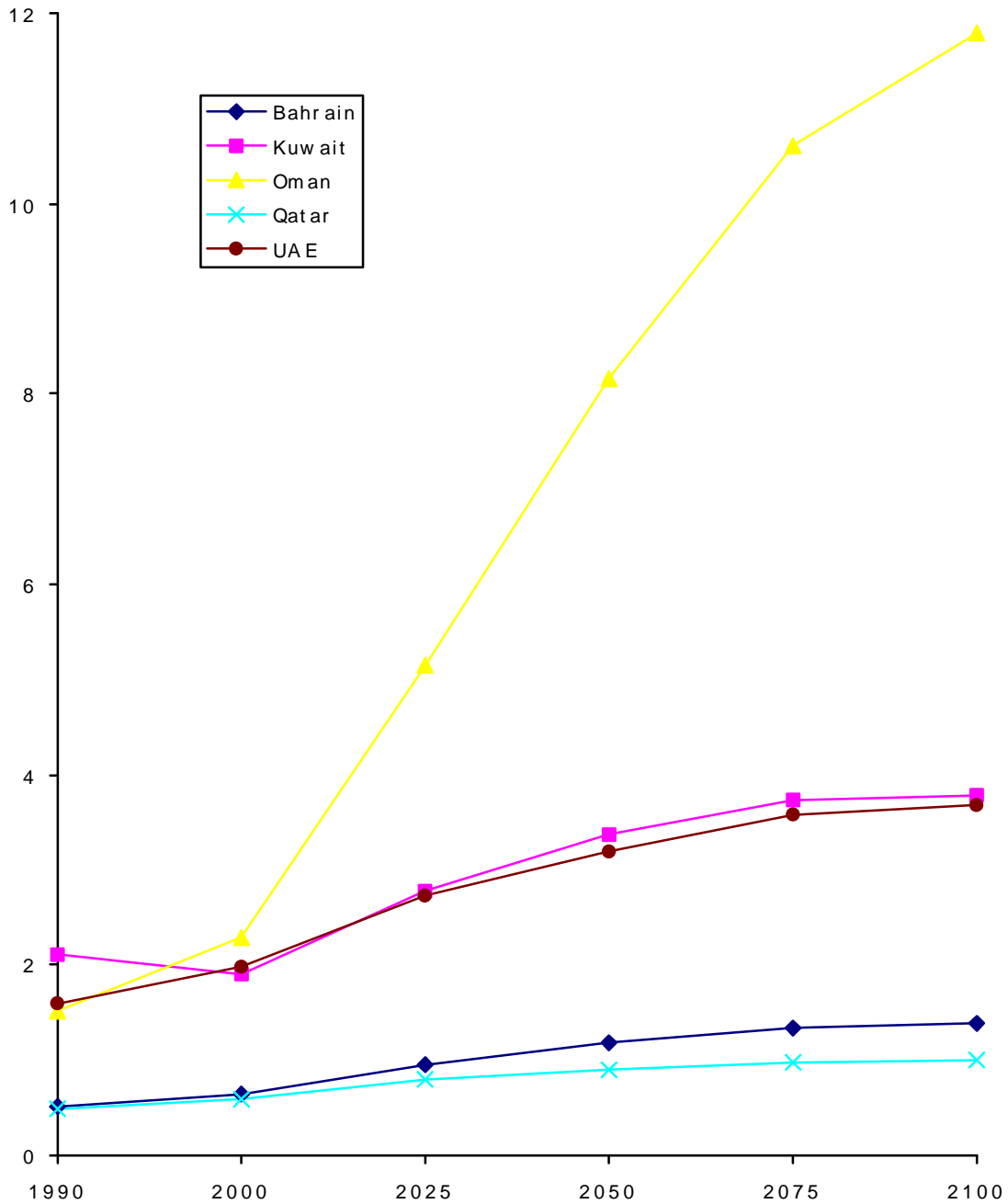
**Estimated Trends in Population of the Smaller Gulf Cooperation Council States During 1990-2030 in 1,000s**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

Chart Nineteen

**Estimated Trends in Population of the Smaller Gulf Cooperation Council States During 1990-2100 in Millions**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.

## **Red Sea Country Trends: 1990-2030**

**There is little hope for many nations in this region. They are overpopulating themselves into a decline in real income, if not starvation.**

**Ethiopia is a demographic disaster area.**

- **Grew from 1.5 million in 1990 to 1.9 million in 1995.**
- **Will rise to 2.3 million in 2000, 2.8 million in 2005, and 3.3 million in 2010.**

**So is Yemen.**

- **Grew from 11.3 million in 1990 to 14.2 million in 1995.**
- **Will rise to 17.0 million in 2000, 20.1 million in 2005, and 23.7 million in 2010.**
- **Already incapable of feeding self and oil will not help.**

**A near-starving and civil war torn-Somalia:**

- **Grew from 7.8 million in 1990 to 9.0 million in 1995.**
- **Will rise to 10.5 million in 2000, 12.2 million in 2005, and 14.1 million in 2010.**

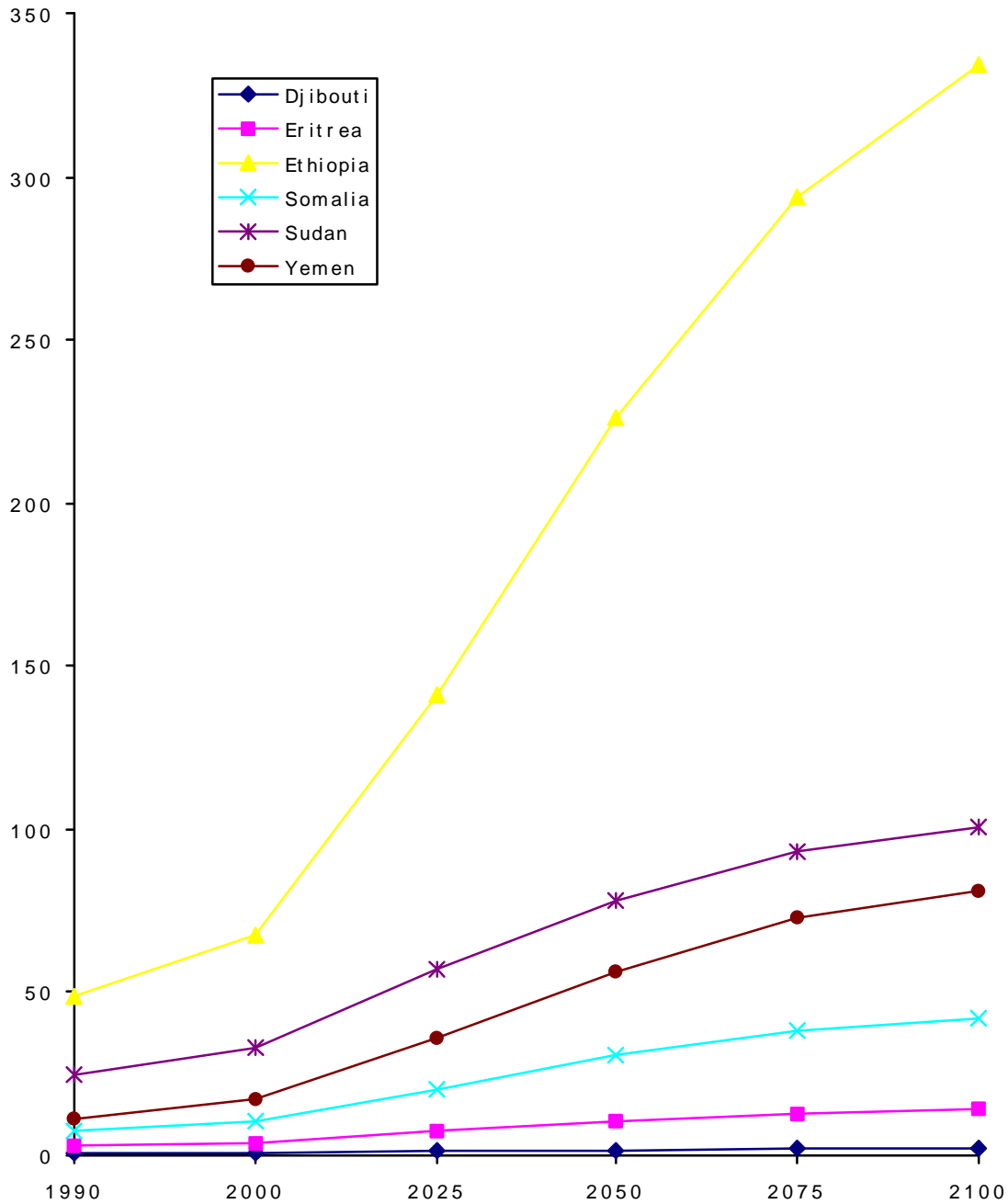
**In spite of constant civil war and starvation, the Sudan:**

- **Grew from 25.1 million in 1990 to 28.8 million in 1995.**
- **Will rise to 33.0 million in 2000, 37.7 million in 2005, and 42.7 million in 2010.**

**Trends in outyears are worse, and indicate the region may pose a growing threat to the Gulf.**

Chart Twenty

**Estimated Trends in Population of the Red Sea States  
During 1990-2100 in Millions**



Source: Adapted by Anthony H. Cordesman from World Bank, World Population Projections, 1994-1995, Washington, World Bank, 1994 and material provided by the CIA.